WORKS

of the late

Doctor Benjamin Franklin:

Consisting of

HIS LIFE WRITTEN BY HIMSELF,

together with

Essays, Humorous, Moral & Literary,

Chiefly in the Manner of

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BRITISH MUSEUM
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MAY

CONTENTS

OF

VOL. II.

	Page
ON Early Marriages - -	1
On the Death of his Brother, Mr. John Franklin - -	6
To the late Doctor Mather of Boston	9
The Whistle, a true Story; written to his Nephew - -	14
A Petition of the Left Hand -	18
The handsome and deformed Leg -	21
Conversation of a Company of Ephemeræ; with the Soliloquy of one advanced in Age - -	22
Morals of Chess - -	33
The Art of procuring pleasant Dreams	43
Advice to a young Tradesman -	55

CONTENTS.

	Page
Neceſſary Hints to thoſe that would be rich - - -	60
The Way to make Money plenty in every Man's Pocket - -	63
An œconomical Project - -	66
On modern Innovations in the Engliſh Language, and in Printing -	78
An Account of the higheſt Court of Judicature in Pennſylvania, viz. the Court of the Preſs - -	91
Paper: a Poem - -	101
On the Art of Swimming - -	105
New Mode of Bathing - -	112
Obſervations on the generally prevailing Doctrines of Life and Death	115
Precautions to be uſed by thoſe who are about to undertake a Sea Voyage	120
On Luxury, Idleneſs, and Induſtry -	132
On the Slave Trade - -	143
Obſervations on War - -	151
On the Impreſs of Seamen - -	155
On the Criminal Laws, and the Practice of Privateering -	164

Remarks

CONTENTS.

Page

Remarks concerning the Savages of North America - - 181

To Mr. Dubourg, concerning the Diſſenſions between England and America - - - - 198

Preference of Bows and Arrows in War to Fire-arms - - 201

A Compariſon of the Conduct of the Ancient Jews, and of the Antifederaliſts in the United States of America - - - 206

The internal State of America: being a true Deſcription of the Intereſt and Policy of that vaſt Continent - - - 217

Information to thoſe who would remove to America - - 230

Final Speech of Dr. Franklin in the late Federal Convention - - 252

Sketch of an Engliſh School - - 258

On the Theory of the Earth - 274

Looſe Thoughts on an univerſal Fluid 284

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MAY

ESSAYS,

HUMOROUS, MORAL, AND LITERARY, &c.

ON EARLY MARRIAGES.

TO JOHN ALLEYNE, ESQ.

DEAR JACK,

YOU desire, you say, my impartial thoughts on the subject of an early marriage, by way of answer to the numberless objections that have been made by numerous persons to your own. You may remember, when you consulted me on the occasion, that I thought youth on both sides to be no objection. Indeed,

from the marriages that have fallen under my obſervation, I am rather inclined to think, that early ones ſtand the beſt chance of happineſs. The temper and habits of the young are not yet become ſo ſtiff and uncomplying, as when more advanced in life; they form more eaſily to each other, and hence many occaſions of diſguſt are removed. And if youth has leſs of that prudence which is neceſſary to manage a family, yet the parents and elder friends of young married perſons are generally at hand to afford their advice, which amply ſupplies that defect; and by early marriage, youth is ſooner formed to regular and uſeful life; and poſſibly ſome of thoſe accidents or connections, that might have injured the conſtitution, or reputation, or both, are thereby happily prevented. Particular circumſtances of particular perſons may poſſibly ſometimes make it prudent to delay entering into

into that ſtate; but in general, when nature has rendered our bodies fit for it, the preſumption is in nature's favour, that ſhe has not judged amiſs in making us deſire it. Late marriages are often attended, too, with this further inconvenience, that there is not the ſame chance that the parents ſhall live to ſee their offspring educated. "Late children," ſays the Spaniſh proverb, "are early "orphans." A melancholy reflection to thoſe whoſe caſe it may be! With us in America, marriages are generally in the morning of life; our children are therefore educated and ſettled in the world by noon; and thus, our buſineſs being done, we have an afternoon and evening of cheerful leiſure to ourſelves, ſuch as our friend at preſent enjoys. By theſe early marriages we are bleſſed with more children; and from the mode among us, founded by nature, of every mother ſuckling and nurſing her own

child, more of them are raiſed. Thence the ſwift progreſs of population among us, unparalleled in Europe. In fine, I am glad you are married, and congratulate you moſt cordially upon it. You are now in the way of becoming a uſeful citizen; and you have eſcaped the unnatural ſtate of celibacy for life—the fate of many here, who never intended it, but who having too long poſtponed the change of their condition, find, at length, that it is too late to think of it, and ſo live all their lives in a ſituation that greatly leſſens a man's value. An odd volume of a ſet of books bears not the value of its proportion to the ſet. What think you of the odd half of a pair of ſciſſars? It can't well cut any thing; it may poſſibly ſerve to ſcrape a trencher.

Pray make my compliments and beſt wiſhes acceptable to your bride. I am old and heavy, or I ſhould ere this have preſented them in perſon. I ſhall make

but ſmall uſe of the old man's privilege, that of giving advice to younger friends. Treat your wife always with reſpect; it will procure reſpect to you, not only from her, but from all that obſerve it. Never uſe a ſlighting expreſſion to her, even in jeſt; for ſlights in jeſt, after frequent bandyings, are apt to end in angry earneſt. Be ſtudious in your profeſſion, and you will be learned. Be induſtrious and frugal, and you will be rich. Be ſober and temperate, and you will be healthy. Be in general virtuous, and you will be happy. At leaſt, you will, by ſuch conduct, ſtand the beſt chance for ſuch conſequences. I pray God to bleſs you both! being ever your affectionate friend,

B. FRANKLIN.

ON THE DEATH OF HIS BROTHER, Mr. JOHN FRANKLIN.

TO MISS HUBBARD.

I CONDOLE with you. We have loſt a moſt dear and valuable relation. But it is the will of God and nature, that theſe mortal bodies be laid aſide, when the ſoul is to enter into real life. This is rather an embryo ſtate, a preparation for living. A man is not completely born until he be dead. Why then ſhould we grieve that a new child is born among the immortals, a new member added to their happy ſociety? We are ſpirits. That bodies ſhould be lent us, while they can afford us pleaſure, aſſiſt us in acquiring knowledge,

or

or doing good to our fellow-creatures, is a kind and benevolent act of God. When they become unfit for theſe purpoſes, and afford us pain inſtead of pleaſure, inſtead of an aid become an incumbrance, and anſwer none of the intentions for which they were given, it is equally kind and benevolent that a way is provided by which we may get rid of them. Death is that way. We ourſelves, in ſome caſes, prudently chooſe a partial death. A mangled painful limb, which cannot be reſtored, we willingly cut off. He who plucks out a tooth parts with it freely, ſince the pain goes with it: and he who quits the whole body parts at once with all pains, and poſſibilities of pains and diſeaſes, it was liable to, or capable of making him ſuffer.

Our friend and we were invited abroad on a party of pleaſure, which is

to laſt for ever. His chair was ready firſt; and he is gone before us. We could not all conveniently ſtart together: and why ſhould you and I be grieved at this, ſince we are ſoon to follow, and know where to find him?

Adieu.

B. FRANKLIN.

TO THE LATE

DOCTOR MATHER OF BOSTON.

REV. SIR,

I RECEIVED your kind letter, with your excellent advice to the people of the United States, which I read with great pleaſure, and hope it will be duly regarded. Such writings, though they may be lightly paſſed over by many readers, yet, if they make a deep impreſſion on one active mind in a hundred, the effects may be conſiderable.

Permit me to mention one little inſtance, which, though it relates to myſelf, will not be quite unintereſting to you. When I was a boy, I met with a book entitled "Eſſays to do good," which I think was written by your father. It had been ſo little regarded by a former poſſeſſor,

poſſeſſor, that ſeveral leaves of it were torn out; but the remainder gave me ſuch a turn of thinking, as to have an influence on my conduct through life: for I have always ſet a greater value on the character of a doer of good, than any other kind of reputation; and if I have been, as you ſeem to think, a uſeful citizen, the public owes the advantage of it to that book.

You mention your being in your ſeventy-eighth year. I am in my ſeventy-ninth. We are grown old together. It is now more than ſixty years ſince I left Boſton; but I remember well both your father and grandfather, having heard them both in the pulpit, and ſeen them in their houſes. The laſt time I ſaw your father was in the beginning of 1724, when I viſited him after my firſt trip to Pennſylvania. He received me in his library; and, on my taking leave, ſhewed me a ſhorter way

out

out of the houſe, through a narrow paſſage, which was croſſed by a beam overhead. We were ſtill talking as I withdrew, he accompanying me behind, and I turning partly towards him, when he ſaid haſtily, "Stoop, ſtoop!" I did not underſtand him till I felt my head hit againſt the beam. He was a man who never miſſed any occaſion of giving inſtruction; and upon this he ſaid to me: "You are young, and have the world "before you: ſtoop as you go through "it, and you will miſs many hard "thumps." This advice, thus beat into my head, has frequently been of uſe to me; and I often think of it, when I ſee pride mortified, and misfortunes brought upon people by their carrying their heads too high.

I long much to ſee again my native place; and once hoped to lay my bones there. I left it in 1723. I viſited it in 1733, 1743, 1753, and 1763; and in

1773

1773 I was in England. In 1775 I had a ſight of it, but could not enter, it being in poſſeſſion of the enemy. I did hope to have been there in 1783, but could not obtain my diſmiſſion from this employment here; and now I fear I ſhall never have that happineſs. My beſt wiſhes however attend my dear country, "*Eſto perpetua!*" It is now bleſſed with an excellent conſtitution: may it laſt for ever!

This powerful monarchy continues its friendſhip for the United States. It is a friendſhip of the utmoſt importance to our ſecurity, and ſhould be carefully cultivated. Britain has not yet well digeſted the loſs of its dominion over us; and has ſtill at times ſome flattering hopes of recovering it. Accidents may increaſe thoſe hopes, and encourage dangerous attempts. A breach between us and France would infallibly bring the Engliſh again upon our backs: and yet

we

we have ſome wild beaſts among our countrymen, who are endeavouring to weaken that connection.

Let us preſerve our reputation, by performing our engagements; our credit, by fulfilling our contracts; and our friends, by gratitude and kindneſs: for we know not how ſoon we may again have occaſion for all of them.

With great and ſincere eſteem,
I have the honour to be,
Reverend Sir,
Your moſt obedient and
moſt humble ſervant,

PASSY, May 12, 1784. } B. FRANKLIN.

THE

THE WHISTLE:

A TRUE STORY.

WRITTEN TO HIS NEPHEW.

WHEN I was a child, at ſeven years old, my friends, on a holiday, filled my pocket with coppers. I went directly to a ſhop where they ſold toys for children; and being charmed with the ſound of a *whiſtle* that I met by the way in the hands of another boy, I voluntarily offered him all my money for one. I then came home, and went whiſtling all over the houſe, much pleaſed with my *whiſtle*, but diſturbing all the family. My brothers, and ſiſters, and couſins, underſtanding the bargain I had made, told me I had given four times as much for it as it was worth. This put me in mind what good things I might have bought

bought with the reſt of the money; and they laughed at me ſo much for my folly, that I cried with vexation; and the reflection gave me more chagrin than the *whiſtle* gave me pleaſure.

This however was afterwards of uſe to me, the impreſſion continuing on my mind; ſo that often, when I was tempted to buy ſome unneceſſary thing, I ſaid to myſelf, *Don't give too much for the whiſtle*; and ſo I ſaved my money.

As I grew up, came into the world, and obſerved the actions of men, I thought I met with many, very many, who *gave too much for the whiſtle.*

When I ſaw any one too ambitious of court favour, ſacrificing his time in attendance on levees, his repoſe, his liberty, his virtue, and perhaps his friends, to attain it, I have ſaid to myſelf, *This man gives too much for his whiſtle.*

When I ſaw another fond of popularity, conſtantly employing himſelf in political

litical buſtles, neglecting his own affairs, and ruining them by that neglect: *He pays, indeed,* ſays I, *too much for his whiſtle.*

If I knew a miſer, who gave up every kind of comfortable living, all the pleaſure of doing good to others, all the eſteem of his fellow-citizens, and the joys of benevolent friendſhip, for the ſake of accumulating wealth; *Poor man!* ſays I, *you do indeed pay too much for your whiſtle.*

When I meet a man of pleaſure ſacrificing every laudable improvement of the mind, or of his fortune, to mere corporeal ſenſations; *Miſtaken man,* ſays I, *you are providing pain for yourſelf, inſtead of pleaſure: you give too much for your whiſtle.*

If I ſee one fond of fine clothes, fine furniture, fine equipages, all above his fortune, for which he contracts debts, and ends his career in priſon; *Alas,* ſays I, *he*

he has paid dear, very dear, for his whiſtle.

When I ſee a beautiful, ſweet-tempered girl married to an ill-natured brute of a huſband: *What a pity it is*, ſays I, *that ſhe has paid ſo much for a whiſtle!*

In ſhort, I conceived that great part of the miſeries of mankind were brought upon them by the falſe eſtimate they had made of the value of things, and by their giving too much for their *whiſtles*.

A PETITION

TO THOSE WHO HAVE THE SUPERINTENDENCY OF EDUCATION.

I ADDRESS myſelf to all the friends of youth, and conjure them to direct their compaſſionate regards to my unhappy fate, in order to remove the prejudices of which I am the victim. There are twin ſiſters of us: and the two eyes of man do not more reſemble, nor are capable of being upon better terms with each other, than my ſiſter and myſelf, were it not for the partiality of our parents, who make the moſt injurious diſtinctions between us. From my infancy, I have been led to conſider my ſiſter as a being of a more elevated rank. I was ſuffered to grow up without the leaſt inſtruction, while nothing was ſpared in her education. She

She had maſters to teach her writing, drawing, muſic, and other accompliſhments; but if by chance I touched a pencil, a pen, or a needle, I was bitterly rebuked: and more than once I have been beaten for being awkward, and wanting a graceful manner. It is true, my ſiſter aſſociated me with her upon ſome occaſions; but ſhe always made a point of taking the lead, calling upon me only from neceſſity, or to figure by her ſide.

But conceive not, Sirs, that my complaints are inſtigated merely by vanity—No; my uneaſineſs is occaſioned by an object much more ſerious. It is the practice in our family, that the whole buſineſs of providing for its ſubſiſtence falls upon my ſiſter and myſelf. If any indiſpoſition ſhould attack my ſiſter—and I mention it in confidence, upon this occaſion, that ſhe is ſubject to the gout, the rheumatiſm, and cramp, without making mention of other accidents—what would be the fate

of our poor family? Muſt not the regret of our parents be exceſſive, at having placed ſo great a difference between ſiſters who are ſo perfectly equal? Alas! we muſt periſh from diſtreſs: for it would not be in my power even to ſcrawl a ſuppliant petition for relief, having been obliged to employ the hand of another in tranſcribing the requeſt which I have now the honour to prefer to you.

Condeſcend, Sirs, to make my parents ſenſible of the injuſtice of an excluſive tenderneſs, and of the neceſſity of diſtributing their care and affection among all their children equally.

I am, with a profound reſpect,

SIRS,

Your obedient ſervant,

THE LEFT HAND.

THE

HANDSOME AND DEFORMED LEG.

THERE are two ſorts of people in the world, who, with equal degrees of health and wealth, and the other comforts of life, become, the one happy, and the other miſerable. This ariſes very much from the different views in which they conſider things, perſons, and events; and the effect of thoſe different views upon their own minds.

In whatever ſituation men can be placed, they may find conveniences and inconveniences: in whatever company, they may find perſons and converſation more or leſs pleaſing: at whatever table, they may meet with meats and drinks of better and worſe taſte, diſhes better and

worſe dreſſed: in whatever climate, they will find good and bad weather: under whatever government, they may find good and bad laws, and good and bad adminiſtration of thoſe laws: in whatever poem, or work of genius, they may ſee faults and beauties: in almoſt every face, and every perſon, they may diſcover fine features and defects, good and bad qualities.

Under theſe circumſtances, the two ſorts of people above mentioned fix their attention; thoſe who are diſpoſed to be happy, on the conveniences of things, the pleaſant parts of converſation, the well dreſſed diſhes, the goodneſs of the wines, the fine weather, &c. and enjoy all with cheerfulneſs. Thoſe who are to be unhappy, think and ſpeak only of the contraries. Hence they are continually diſcontented themſelves, and, by their remarks, ſour the pleaſures of ſociety, offend perſonally many people, and make themſelves

ſelves every where diſagreeable. If this turn of mind was founded in nature, ſuch unhappy perſons would be the more to be pitied. But as the diſpoſition to criticiſe, and to be diſguſted, is, perhaps, taken up originally by imitation, and is, unawares, grown into a habit, which, though at preſent ſtrong, may nevertheleſs be cured, when thoſe who have it are convinced of its bad effects on their felicity; I hope this little admonition may be of ſervice to them, and put them on changing a habit, which, though in the exerciſe it is chiefly an act of imagination, yet has ſerious conſequences in life, as it brings on real griefs and misfortunes. For as many are offended by, and nobody loves, this ſort of people; no one ſhows them more than the moſt common civility and reſpect, and ſcarcely that; and this frequently puts them out of humour, and draws them into diſputes

and contentions. If they aim at obtaining ſome advantage in rank or fortune, nobody wiſhes them ſucceſs, or will ſtir a ſtep, or ſpeak a word, to favour their pretenſions. If they incur public cenſure or diſgrace, no one will defend or excuſe, and many join to aggravate, their miſconduct, and render them completely odious. If theſe people will not change this bad habit, and condeſcend to be pleaſed with what is pleaſing, without fretting themſelves and others about the contraries, it is good for others to avoid an acquaintance with them; which is always diſagreeable, and ſometimes very inconvenient, eſpecially when one finds oneſelf entangled in their quarrels.

An old philoſophical friend of mine was grown, from experience, very cautious in this particular, and carefully avoided any intimacy with ſuch people. He had, like other philoſophers, a thermometer

mometer to ſhow him the heat of the weather; and a barometer, to mark when it was likely to prove good or bad; but there being no inſtrument invented to diſcover, at firſt ſight, this unpleaſing diſpoſition in a perſon, he, for that purpoſe, made uſe of his legs; one of which was remarkably handſome, the other, by ſome accident, crooked and deformed. If a ſtranger, at the firſt interview, regarded his ugly leg more than his handſome one, he doubted him. If he ſpoke of it, and took no notice of the handſome leg, that was ſufficient to determine my philoſopher to have no further acquaintance with him. Every body has not this two-legged inſtrument; but every one, with a little attention, may obſerve ſigns of that carping, fault-finding diſpoſition, and take the ſame reſolution of avoiding the acquaintance of thoſe infected with it. I therefore adviſe thoſe critical, querulous,

rulous, discontented, unhappy people, that if they wish to be respected and beloved by others, and happy in themselves, they should *leave off looking at the ugly leg.*

CON-

CONVERSATION

OF A

COMPANY OF EPHEMERÆ;

WITH THE SOLILOQUY OF ONE ADVANCED IN AGE.

TO MADAME BRILLIANT.

YOU may remember, my dear friend, that when we lately ſpent that happy day in the delightful garden and ſweet ſociety of the *Moulin Joly*, I ſtopped a little in one of our walks, and ſtaid ſome time behind the company. We had been ſhown numberleſs ſkeletons of a kind of little fly called an Ephemera, whoſe ſucceſſive generations, we were told, were bred

and

and expired within the day. I happened to ſee a living company of them on a leaf, who appeared to be engaged in converſation. You know I underſtand all the inferior animal tongues; my too great application to the ſtudy of them is the beſt excuſe I can give for the little progreſs I have made in your charming language. I liſtened through curioſity to the diſcourſe of theſe little creatures; but as they, in their national vivacity, ſpoke three or four together, I could make but little of their converſation. I found, however, by ſome broken expreſſions that I heard now and then, they were diſputing warmly on the merit of two foreign muſicians, one a *couſin*, the other a *muſcheto*; in which diſpute they ſpent their time, ſeemingly as regardleſs of the ſhortneſs of life as if they had been ſure of living a month. Happy people! thought I, you live certainly under a wiſe, juſt, and mild government,

ſince you have no public grievances to complain of, nor any ſubject of contention, but the perfections or imperfections of foreign muſic. I turned my head from them to an old grey-headed one, who was ſingle on another leaf, and talking to himſelf. Being amuſed with his ſoliloquy, I put it down in writing, in hopes it will likewiſe amuſe her to whom I am ſo much indebted for the moſt pleaſing of all amuſements, her delicious company, and heavenly harmony.

"It was," ſays he, "the opinion of "learned philoſophers of our race, who "lived and flouriſhed long before my "time, that this vaſt world, the *Moulin* "*Joly*, could not itſelf ſubſiſt more than "eighteen hours: and I think there "was ſome foundation for that opinion; "ſince, by the apparent motion of the "great luminary that gives life to all "nature, and which in my time has evi-

"dently

" dently declined conſiderably towards the
" ocean at the end of our earth, it muſt
" then finiſh its courſe, be extinguiſhed
" in the waters that ſurround us, and
" leave the world in cold and darkneſs,
" neceſſarily producing univerſal death
" and deſtruction. I have lived ſeven
" of thoſe hours; a great age, being no
" leſs than 420 minutes of time. How
" very few of us continue ſo long! I
" have ſeen generations born, flouriſh,
" and expire. My preſent friends are
" the children and grand-children of the
" friends of my youth, who are now,
" alas, no more! And I muſt ſoon
" follow them; for, by the courſe of na-
" ture, though ſtill in health, I cannot
" expect to live above ſeven or eight
" minutes longer. What now avails all
" my toil and labour, in amaſſing honey-
" dew on this leaf, which I cannot live
" to enjoy? What the political ſtruggles
" I have been engaged in, for the good

" of

"of my compatriot inhabitants of this
"buſh, or my philoſophical ſtudies, for the
"benefit of our race in general? for in
"politics (what can laws do without mo-
"rals?) our preſent race of ephemeræ will
"in a courſe of minutes become corrupt,
"like thoſe of other and older buſhes,
"and conſequently as wretched. And
"in philoſophy how ſmall our progreſs!
"Alas! art is long, and life is ſhort!
"My friends would comfort me with
"the idea of a name, they ſay, I ſhall
"leave behind me; and they tell me I
"have lived long enough to nature and
"to glory. But what will fame be to
"an ephemera who no longer exiſts?
"and what will become of all hiſtory in
"the eighteenth hour, when the world
"itſelf, even the whole *Moulin Joly*,
"ſhall come to its end, and be buried in
"univerſal ruin?"——

To me, after all my eager purſuits, no ſolid pleaſures now remain, but the reflection

flection of a long life ſpent in meaning well, the ſenſible converſation of a few good lady ephemeræ, and now and then a kind ſmile and a tune from the ever amiable Brilliant.

B. FRANKLIN.

ON

MORALS OF CHESS.

PLAYING at cheſs is the moſt ancient and moſt univerſal game known among men; for its original is beyond the memory of hiſtory, and it has, for numberleſs ages, been the amuſement of all the civilized nations of Aſia, the Perſians, the Indians, and the Chineſe. Europe has had it above a thouſand years; the Spaniards have ſpread it over their part of America, and it begins lately to make its appearance in theſe ſtates. It is ſo intereſting in itſelf, as not to need the view of gain to induce engaging in it; and thence it is never played for money. Thoſe, therefore, who have leiſure for ſuch diverſions, cannot find one that is more innocent; and the following piece, written with a view to cor-

rect (among a few young friends) ſome little improprieties in the practice of it, ſhews at the ſame time that it may, in its effects on the mind, be not merely innocent, but advantageous, to the vanquiſhed as well as the victor.

THE game of cheſs is not merely an idle amuſement. Several very valuable qualities of the mind, uſeful in the courſe of human life, are to be acquired or ſtrengthened by it, ſo as to become habits, ready on all occaſions. For life is a kind of cheſs, in which we have often points to gain, and competitors or adverſaries to contend with, and in which there is a vaſt variety of good and ill events, that are, in ſome degree, the effects of prudence or the want of it. By playing at cheſs, then, we may learn,

I. *Foreſight*, which looks a little into futurity, and conſiders the conſequences that may attend an action: for it is continually

continually occurring to the player, "If "I move this piece, what will be the "advantage of my new ſituation? What "uſe can my adverſary make of it to "annoy me? What other moves can I "make to ſupport it, and to defend my-"ſelf from his attacks?"

II. *Circumſpection*, which ſurveys the whole cheſs-board, or ſcene of action, the relations of the ſeveral pieces and ſituations, the dangers they are reſpectively expoſed to, the ſeveral poſſibilities of their aiding each other, the probabilities that the adverſary may make this or that move, and attack this or the other piece, and what different means can be uſed to avoid his ſtroke, or turn its conſequences againſt him.

III. *Caution*, not to make our moves too haſtily. This habit is beſt acquired by obſerving ſtrictly the laws of the game, ſuch as, "If you touch a piece, "you muſt move it ſomewhere; if you

"ſet it down, you muſt let it ſtand:" and it is therefore beſt that theſe rules ſhould be obſerved, as the game thereby becomes more the image of human life, and particularly of war; in which, if you have incautiouſly put yourſelf into a bad and dangerous poſition, you cannot obtain your enemy's leave to withdraw your troops, and place them more ſecurely, but you muſt abide all the conſequences of your raſhneſs.

And laſtly, we learn by cheſs the habit of *not being diſcouraged by preſent bad appearances in the ſtate of our affairs*, the habit of *hoping for a favourable change*, and that of *perſevering in the ſearch of reſources*. The game is ſo full of events, there is ſuch a variety of turns in it, the fortune of it is ſo ſubject to ſudden viciſſitudes, and one ſo frequently, after long contemplation, diſcovers the means of extricating oneſelf from a ſuppoſed inſurmountable difficulty, that one is encouraged to con-

tinue the conteſt to the laſt, in hopes of victory by our own ſkill, or at leaſt of giving a ſtale mate by the negligence of our adverſary. And whoever conſiders, what in cheſs he often ſees inſtances of, that particular pieces of ſucceſs are apt to produce preſumption, and its conſequent inattention, by which the loſs may be recovered, will learn not to be too much diſcouraged by the preſent ſucceſs of his adverſary, nor to deſpair of final good fortune, upon every little check he receives in the purſuit of it.

That we may, therefore, be induced more frequently to chooſe this beneficial amuſement, in preference to others which are not attended with the ſame advantages, every circumſtance which may increaſe the pleaſures of it ſhould be regarded; and every action or word that is unfair, diſreſpectful, or that in any way may give uneaſineſs, ſhould be avoided, as contrary to the immediate

intention of both the players, which is, to paſs the time agreeably.

Therefore, firſt, If it is agreed to play according to the ſtrict rules; then thoſe rules are to be exactly obſerved by both parties, and ſhould not be inſiſted on for one ſide, while deviated from by the other—for this is not equitable.

Secondly, If it is agreed not to obſerve the rules exactly, but one party demands indulgencies, he ſhould then be as willing to allow them to the other.

Thirdly, No falſe move ſhould ever be made to extricate yourſelf out of a difficulty, or to gain an advantage. There can be no pleaſure in playing with a perſon once detected in ſuch unfair practices.

Fourthly, If your adverſary is long in playing, you ought not to hurry him, or expreſs any uneaſineſs at his delay. You ſhould not ſing, nor whiſtle, nor look at your watch, nor take up a book

to

to read, nor make a tapping with your feet on the floor, or with your fingers on the table, nor do any thing that may diſturb his attention. For all theſe things diſpleaſe; and they do not ſhew your ſkill in playing, but your craftineſs or your rudeneſs.

Fifthly, You ought not to endeavour to amuſe and deceive your adverſary, by pretending to have made bad moves, and ſaying that you have now loſt the game, in order to make him ſecure and careleſs, and inattentive to your ſchemes: for this is fraud and deceit, not ſkill in the game.

Sixthly, You muſt not, when you have gained a victory, uſe any triumphing or inſulting expreſſion, nor ſhow too much pleaſure; but endeavour to conſole your adverſary, and make him leſs diſſatisfied with himſelf, by every kind of civil expreſſion that may be uſed with truth, ſuch as, "You under-

" ſtand the game better than I, but you " are a little inattentive;" or, " You " play too faſt;" or, " You had the beſt " of the game, but ſomething happened " to divert your thoughts, and that turned " it in my favour."

Seventhly, If you are a ſpectator while others play, obſerve the moſt perfect ſilence. For if you give advice you offend both parties; him againſt whom you give it, becauſe it may cauſe the loſs of his game; him in whoſe favour you give it, becauſe, though it be good, and he follows it, he loſes the pleaſure he might have had, if you had permitted him to think until it had occurred to himſelf. Even after a move, or moves, you muſt not, by replacing the pieces, ſhew how it might have been placed better: for that diſpleaſes, and may occaſion diſputes and doubts about their true ſituation. All talking to the players leſſens or diverts their attention, and

is

is therefore unpleaſing. Nor ſhould you give the leaſt hint to either party, by any kind of noiſe or motion. If you do, you are unworthy to be a ſpectator. If you have a mind to exerciſe or ſhow your judgment, do it in playing your own game, when you have an opportunity, not in criticiſing, or meddling with, or counſelling the play of others.

Laſtly, If the game is not to be played rigorouſly, according to the rules above mentioned, then moderate your deſire of victory over your adverſary, and be pleaſed with one over yourſelf. Snatch not eagerly at every advantage offered by his unſkilfulneſs or inattention; but point out to him kindly, that by ſuch a move he places or leaves a piece in danger and unſupported; that by another he will put his king in a perilous ſituation, &c. By this generous civility (ſo oppoſite to the unfairneſs above forbidden) you may, indeed, happen

pen to loſe the game to your opponent, but you will win what is better, his eſteem, his reſpect, and his affection; together with the ſilent approbation and good-will of impartial ſpectators.

THE

THE

ART OF PROCURING PLEASANT DREAMS.

INSCRIBED TO MISS ***,

Being written at her requeſt.

AS a great part of our life is ſpent in ſleep, during which we have ſometimes pleaſing, and ſometimes painful dreams, it becomes of ſome conſequence to obtain the one kind, and avoid the other; for, whether real or imaginary, pain is pain, and pleaſure is pleaſure. If we can ſleep without dreaming, it is well that painful dreams are avoided. If, while we ſleep, we can have any pleaſing dreams, it is, as the French ſay, *tant gagné*,

gagné, ſo much added to the pleaſure of life.

To this end it is, in the firſt place, neceſſary to be careful in preſerving health, by due exerciſe, and great temperance; for, in ſickneſs, the imagination is diſturbed; and diſagreeable, ſometimes terrible, ideas are apt to preſent themſelves. Exerciſe ſhould precede meals, not immediately follow them: the firſt promotes, the latter, unleſs moderate, obſtructs digeſtion. If, after exerciſe, we feed ſparingly, the digeſtion will be eaſy and good, the body lightſome, the temper cheerful, and all the animal functions performed agreeably. Sleep, when it follows, will be natural and undiſturbed. While indolence, with full feeding, occaſions nightmares and horrors inexpreſſible. we fall from precipices, are aſſaulted by wild beaſts, murderers, and demons, and experience

perience every variety of diſtreſs. Obſerve, however, that the quantities of food and exerciſe are relative things: thoſe who move much may, and indeed ought to eat more; thoſe who uſe little exerciſe, ſhould eat little. In general, mankind, ſince the improvement of cookery, eat about twice as much as nature requires. Suppers are not bad, if we have not dined; but reſtleſs nights naturally follow hearty ſuppers after full dinners. Indeed, as there is a difference in conſtitutions, ſome reſt well after theſe meals; it coſts them only a frightful dream, and an apoplexy, after which they ſleep till doomſday. Nothing is more common in the newſpapers, than inſtances of people, who, after eating a hearty ſupper, are found dead a-bed in the morning.

Another means of preſerving health, to be attended to, is the having a conſtant ſupply of freſh air in your bed-chamber.

chamber. It has been a great miſtake, the ſleeping in rooms exactly cloſed, and in beds ſurrounded by curtains. No outward air, that may come in to you, is ſo unwholſome as the unchanged air, often breathed, of a cloſe chamber. As boiling water does not grow hotter by longer boiling, if the particles that receive greater heat can eſcape; ſo living bodies do not putrefy, if the particles, as faſt as they become putrid, can be thrown off. Nature expels them by the pores of the ſkin and lungs, and in a free open air they are carried off; but, in a cloſe room, we receive them again and again, though they become more and more corrupt. A number of perſons crowded into a ſmall room, thus ſpoil the air in a few minutes, and even render it mortal, as in the Black Hole at Calcutta. A ſingle perſon is ſaid to ſpoil only a gallon of air per minute, and therefore requires a longer time to ſpoil a chamber-full;

full; but it is done, however, in proportion, and many putrid diſorders hence have their origin. It is recorded of Methuſalem, who, being the longeſt liver, may be ſuppoſed to have beſt preſerved his health, that he ſlept always in the open air; for, when he had lived five hundred years, an angel ſaid to him: "Ariſe, "Methuſalem, and build thee an houſe; "for thou ſhalt live yet five hundred "years longer." But Methuſalem anſwered and ſaid: "If I am to live but "five hundred years longer, it is not "worth while to build me an houſe—I "will ſleep in the air as I have been uſed "to do." Phyſicians, after having for ages contended that the ſick ſhould not be indulged with freſh air, have at length diſcovered that it may do them good. It is therefore to be hoped that they may in time diſcover likewiſe, that it is not hurtful to thoſe who are in health; and that we may be then cured of the

aërophobia

aërophobia that at preſent diſtreſſes weak minds, and makes them chooſe to be ſtifled and poiſoned, rather than leave open the window of a bed-chamber, or put down the glaſs of a coach.

Confined air, when ſaturated with perſpirable matter *, will not receive more: and that matter muſt remain in our bodies, and occaſion diſeaſes: but it gives ſome previous notice of its being about to be hurtful, by producing certain uneaſineſſes, ſlight indeed at firſt, ſuch as, with regard to the lungs, is a tickling ſenſation, and to the pores of the ſkin a kind of reſtleſſneſs which is difficult to deſcribe, and few that feel it know the cauſe of it. But we may recollect, that ſometimes, on waking in the night, we have, if warmly covered, found it

* What phyſicians call the perſpirable matter, is the vapour which paſſes off from our bodies, from the lungs, and through the pores of the ſkin. The quantity of this is ſaid to be five-eighths of what we eat.

difficult

difficult to get aſleep again. We turn often without finding repoſe in any poſition. This fidgettineſs, to uſe a vulgar expreſſion for want of a better, is occaſioned wholly by an uneaſineſs in the ſkin, owing to the retention of the perſpirable matter—the bed-clothes having received their quantity, and, being ſaturated, refuſing to take any more. To become ſenſible of this by an experiment, let a perſon keep his poſition in the bed, but throw off the bed-clothes, and ſuffer freſh air to approach the part uncovered of his body; he will then feel that part ſuddenly refreſhed; for the air will immediately relieve the ſkin, by receiving, licking up, and carrying off, the load of perſpirable matter that incommoded it. For every portion of cool air that approaches the warm ſkin, in receiving its part of that vapour, receives therewith a degree of

heat that rarefies and renders it lighter, when it will be puſhed away, with its burthen, by cooler, and therefore heavier freſh air; which, for a moment, ſupplies its place, and then, being likewiſe changed, and warmed, gives way to a ſucceeding quantity. This is the order of nature, to prevent animals being infected by their own perſpiration. He will now be ſenſible of the difference between the part expoſed to the air, and that which, remaining ſunk in the bed, denies the air acceſs: for this part now manifeſts its uneaſineſs more diſtinctly by the compariſon, and the ſeat of the uneaſineſs is more plainly perceived, than when the whole ſurface of the body was affected by it.

Here, then, is one great and general cauſe of unpleaſing dreams. For when the body is uneaſy, the mind will be diſturbed by it, and diſagreeable ideas

of

of various kinds will, in ſleep, be the natural conſequences. The remedies, preventative, and curative, follow:

1. By eating moderately (as before adviſed for health's ſake) leſs perſpirable matter is produced in a given time; hence the bed-clothes receive it longer before they are ſaturated; and we may, therefore, ſleep longer, before we are made uneaſy by their refuſing to receive any more.

2. By uſing thinner and more porous bed-clothes, which will ſuffer the perſpirable matter more eaſily to paſs through them, we are leſs incommoded, ſuch being longer tolerable.

3. When you are awakened by this uneaſineſs, and find you cannot eaſily ſleep again, get out of bed, beat up and turn your pillow, ſhake the bed-clothes well, with at leaſt twenty ſhakes, then throw the bed open, and leave it to cool; in the meanwhile, continuing undreſt,

walk about your chamber, till your ſkin has had time to diſcharge its load, which it will do ſooner as the air may be drier and colder. When you begin to feel the cold air unpleaſant, then return to your bed; and you will ſoon fall aſleep, and your ſleep will be ſweet and pleaſant. All the ſcenes preſented to your fancy will be of the pleaſing kind. I am often as agreeably entertained with them, as by the ſcenery of an opera. If you happen to be too indolent to get out of bed, you may, inſtead of it, lift up your bed-clothes with one arm and leg, ſo as to draw in a good deal of freſh air, and, by letting them fall, force it out again. This repeated twenty times will ſo clear them of the perſpirable matter they have imbibed, as to permit your ſleeping well for ſome time afterwards. But this latter method is not equal to the former.

Thoſe

Thoſe who do not love trouble, and can afford to have two beds, will find great luxury in riſing, when they awake in a hot bed, and going into the cool one. Such ſhifting of beds would alſo be of great ſervice to perſons ill of a fever, as it refreſhes, and frequently procures ſleep. A very large bed, that will admit a removal ſo diſtant from the firſt ſituation as to be cool and ſweet, may in a degree anſwer the ſame end.

One or two obſervations more will conclude this little piece. Care muſt be taken, when you lie down, to diſpoſe your pillow ſo as to ſuit your manner of placing your head, and to be perfectly eaſy; then place your limbs ſo as not to bear inconveniently hard upon one another, as, for inſtance, the joints of your ancles: for though a bad poſition may at firſt give but little pain, and be hardly noticed, yet a continuance

will render it leſs tolerable, and the uneaſineſs may come on while you are aſleep, and diſturb your imagination.

Theſe are the rules of the art. But though they will generally prove effectual in producing the end intended, there is a caſe in which the moſt punctual obſervance of them will be totally fruitleſs. I need not mention the caſe to you, my dear friend: but my account of the art would be imperfect without it. The caſe is, when the perſon who deſires to have pleaſant dreams has not taken care to preſerve, what is neceſſary above all things,

A GOOD CONSCIENCE.

ADVICE.

ADVICE TO A YOUNG TRADESMAN.

WRITTEN ANNO 1748.

To my Friend A. B.

As you have deſired it of me, I write the following Hints, which have been of ſervice to me, and may, if obſerved, be ſo to you.

REMEMBER that *time* is money. He that can earn ten ſhillings a day, by his labour, and goes abroad, or ſits idle one half of that day, though he ſpends but ſixpence during his diverſion or idleneſs, ought not to reckon *that* the only expence; he has really ſpent, or rather thrown away, five ſhillings beſides.

Remember that *credit* is money. If a man lets his money lie in my hands

after it is due, he gives me the intereſt, or ſo much as I can make of it during that time. This amounts to a conſiderable ſum where a man has good and large credit, and makes good uſe of it.

Remember that money is of a prolific generating nature. Money can beget money, and its offspring can beget more, and ſo on. Five ſhillings turned is ſix; turned again, it is ſeven and three-pence; and ſo on till it becomes an hundred pounds. The more there is of it, the more it produces every turning, ſo that the profits riſe quicker and quicker. He that kills a breeding ſow, deſtroys all her offspring to the thouſandth generation. He that murders a crown, deſtroys all that it might have produced, even ſcores of pounds.

Remember that ſix pounds a year is but a groat a day. For this little ſum (which may be daily waſted either in time or expence unperceived), a man

of

of credit may, on his own ſecurity, have the conſtant poſſeſſion and uſe of an hundred pounds. So much in ſtock, briſkly turned by an induſtrious man, produces great advantage.

Remember this ſaying, "The good paymaſter is lord of another man's purſe." He that is known to pay punctually and exactly to the time he promiſes, may at any time, and on any occaſion, raiſe all the money his friends can ſpare. This is ſometimes of great uſe. After induſtry and frugality, nothing contributes more to the raiſing of a young man in the world, than punctuality and juſtice in all his dealings: therefore never keep borrowed money an hour beyond the time you promiſed, leſt a diſappointment ſhut up your friend's purſe for ever.

The moſt trifling actions that affect a man's credit are to be regarded. The ſound of your hammer at five in the morning,

morning, or nine at night, heard by a creditor, makes him eaſy ſix months longer: but if he ſees you at a billiard table, or hears your voice at a tavern, when you ſhould be at work, he ſends for his money the next day; demands it, before he can receive it, in a lump.

It ſhews, beſides, that you are mindful of what you owe; it makes you appear a careful, as well as an honeſt man, and that ſtill increaſes your credit.

Beware of thinking all your own that you poſſeſs, and of living accordingly. It is a miſtake that many people who have credit fall into. To prevent this, keep an exact account, for ſome time, both of your expences and your income. If you take the pains at firſt to mention particulars, it will have this good effect; you will diſcover how wonderfully ſmall trifling expences mount up to large ſums, and will diſcern what might have been, and may for the future

be ſaved, without occaſioning any great inconvenience.

In ſhort, the way to wealth, if you deſire it, is as plain as the way to market. It depends chiefly on two words, *induſtry* and *frugality*; that is, waſte neither *time* nor *money*, but make the beſt uſe of both. Without induſtry and frugality nothing will do, and with them every thing. He that gets all he can honeſtly, and ſaves all he gets (neceſſary expences excepted), will certainly become *rich*—if that Being who governs the world, to whom all ſhould look for a bleſſing on their honeſt endeavours, doth not, in his wiſe providence, otherwiſe determine.

AN OLD TRADESMAN.

NECES-

NECESSARY HINTS TO THOSE THAT WOULD BE RICH.

WRITTEN ANNO 1736.

THE uſe of money is all the advantage there is in having money.

For ſix pounds a year you may have the uſe of one hundred pounds, provided you are a man of known prudence and honeſty.

He that ſpends a groat a day idly, ſpends idly above ſix pounds a year, which is the price for the uſe of one hundred pounds.

He that waſtes idly a groat's worth of his time per day, one day with another, waſtes the privilege of uſing one hundred pounds each day.

He that idly loſes five ſhillings worth of

of time, loſes five ſhillings, and might as prudently throw five ſhillings into the ſea.

He that loſes five ſhillings, not only loſes that ſum, but all the advantage that might be made by turning it in dealing, which, by the time that a young man becomes old, will amount to a conſiderable ſum of money.

Again: he that ſells upon credit, aſks a price for what he ſells equivalent to the principal and intereſt of his money for the time he is to be kept out of it; therefore, he that buys upon credit, pays intereſt for what he buys; and he that pays ready money, might let that money out to uſe: ſo that he that poſſeſſes any thing he has bought, pays intereſt for the uſe of it.

Yet, in buying goods, it is beſt to pay ready money, becauſe he that ſells upon credit expects to loſe five per cent. by bad debts; therefore he charges, on all

all he ſells upon credit, an advance that ſhall make up that deficiency.

Thoſe who pay for what they buy upon credit, pay their ſhare of this advance.

He that pays ready money, eſcapes, or may eſcape, that charge.

A penny ſav'd is two-pence clear;
A pin a day's a groat a year.

THE WAY TO MAKE MONEY PLENTY IN EVERY MAN'S POCKET.

AT this time, when the general complaint is that—"money is ſcarce," it will be an act of kindneſs to inform the moneyleſs how they may reinforce their pockets. I will acquaint them with the true ſecret of money-catching—the certain way to fill empty purſes—and how to keep them always full. Two ſimple rules, well obſerved, will do the buſineſs.

Firſt, let honeſty and induſtry be thy conſtant companions; and,

Secondly, ſpend one penny leſs than thy clear gains.

Then ſhall thy hide-bound pocket ſoon begin to thrive, and will never again

again cry with the empty belly-ach: neither will creditors inſult thee, nor want oppreſs, nor hunger bite, nor nakedneſs freeze thee. The whole hemiſphere will ſhine brighter, and pleaſure ſpring up in every corner of thy heart. Now, therefore, embrace theſe rules and be happy. Baniſh the bleak winds of ſorrow from thy mind, and live independent. Then ſhalt thou be a man, and not hide thy face at the approach of the rich, nor ſuffer the pain of feeling little when the ſons of fortune walk at thy right hand: for independency, whether with little or much, is good-fortune, and placeth thee on even ground with the proudeſt of the golden fleece. Oh, then, be wiſe, and let induſtry walk with thee in the morning, and attend thee until thou reacheſt the evening hour for reſt. Let honeſty be as the breath of thy ſoul, and never forget to have a penny, when all thy

expences

expences are enumerated and paid: then ſhalt thou reach the point of happineſs, and independence ſhall be thy ſhield and buckler, thy helmet and crown; then ſhall thy ſoul walk upright, nor ſtoop to the ſilken wretch becauſe he hath riches, nor pocket an abuſe becauſe the hand which offers it wears a ring ſet with diamonds.

AN ŒCONOMICAL PROJECT.

[*A Translation of this Letter appeared in one of the Daily Papers of Paris, about the Year* 1784. *The following is the Original Piece, with some Additions and Corrections made in it by the Author.*]

To the AUTHOR *of the* JOURNAL.

MESSIEURS,

YOU often entertain us with accounts of new diſcoveries. Permit me to communicate to the public, through your paper, one that has lately been made by myſelf, and which I conceive may be of great utility.

I was the other evening in a grand company, where the new lamp of Meſſrs. Quinquet

Quinquet and Lange was introduced, and much admired for its ſplendour; but a general enquiry was made, whether the oil it conſumed was not in proportion to the light it afforded, in which caſe there would be no ſaving in the uſe of it. No one preſent could ſatisfy us in that point, which all agreed ought to be known; it being a very deſirable thing to leſſen, if poſſible, the expence of lighting our apartments, when every other article of family expence was ſo much augmented.

I was pleaſed to ſee this general concern for œconomy; for I love œconomy exceedingly.

I went home, and to bed, three or four hours after midnight, with my head full of the ſubject. An accidental ſudden noiſe waked me about ſix in the morning, when I was ſurpriſed to find my room filled with light; and I imagined at firſt, that a number of thoſe

lamps had been brought into it: but, rubbing my eyes, I perceived the light came in at the windows. I got up, and looked out to ſee what might be the occaſion of it, when I ſaw the ſun juſt riſing above the horizon, from whence he poured his rays plentifully into my chamber, my domeſtic having, negligently omitted the preceding evening to cloſe the ſhutters.

I looked at my watch, which goes very well, and found that it was but ſix o'clock; and ſtill thinking it ſomething extraordinary that the ſun ſhould riſe ſo early, I looked into the almanack, where I found it to be the hour given for his riſing on that day. I looked forward too, and found he was to riſe ſtill earlier every day till towards the end of June; and that at no time in the year he retarded his riſing ſo long as till eight o'clock. Your readers who with me have never ſeen any ſigns of ſunſhine

before noon, and seldom regard the astronomical part of the almanack, will be as much astonished as I was, when they hear of his rising so early; and especially when I assure them, *that he gives light as soon as he rises.* I am convinced of this. I am certain of my fact. One cannot be more certain of any fact. I saw it with my own eyes. And having repeated this observation the three following mornings, I found always precisely the same result.

Yet so it happens, that when I speak of this discovery to others, I can easily perceive by their countenances, though they forbear expressing it in words, that they do not quite believe me. One indeed, who is a learned natural philosopher, has assured me, that I must certainly be mistaken as to the circumstance of the light coming into my room; for it being well known, as he says, that there could be no light abroad at that hour,

it follows that none could enter from without; and that of conſequence, my windows being accidentally left open, inſtead of letting in the light, had only ſerved to let out the darkneſs: and he uſed many ingenious arguments to ſhow me how I might, by that means, have been deceived. I own that he puzzled me a little, but he did not ſatisfy me; and the ſubſequent obſervations I made, as above mentioned, confirmed me in my firſt opinion.

This event has given riſe, in my mind, to ſeveral ſerious and inportant reflections. I conſidered that, if I had not been awakened ſo early in the morning, I ſhould have ſlept ſix hours longer by the light of the ſun, and in exchange have lived ſix hours the following night by candle-light; and the latter being a much more expenſive light than the former, my love of œconomy induced me to muſter up what little arithmetic

I was

I was maſter of, and to make ſome calculations, which I ſhall give you, after obſerving that utility is, in my opinion, the teſt of value in matters of invention, and that a diſcovery which can be applied to no uſe, or is not good for ſomething, is good for nothing.

I took for the baſis of my calculation the ſuppoſition that there are 100,000 families in Paris, and that theſe families conſume in the night half a pound of bougies, or candles, per hour. I think this is a moderate allowance, taking one family with another; for though I believe ſome conſume leſs, I know that many conſume a great deal more. Then eſtimating ſeven hours per day, as the medium quantity between the time of the ſun's riſing and ours, he riſing during the ſix following months from ſix to eight hours before noon, and there being ſeven hours of courſe per night in which we

burn candles, the account will ſtand thus—

In the ſix months between the twentieth of March and the twentieth of September, there are

Nights - - - -	183
Hours of each night in which we burn candles	7
Multiplication gives for the total number of hours - - - -	1,281
Theſe 1,281 hours multiplied by 100,000, the number of families, give - - - -	128,100,000

Onehundredtwenty-eight millions and one hundred thouſand hours, ſpent at Paris by candle-light, which, at half a pound of wax and tallow

tallow per hour, gives the weight of - - 64,050,000

Sixty-four millions and fifty thouſand of pounds, which, eſtimating the whole at the medium price of thirty ſols the pound, makes the ſum of ninety-ſix millions and ſeventy-five thouſand livres tournois - 96,075,000

An immenſe ſum! that the city of Paris might ſave every year, by the œconomy of uſing ſunſhine inſtead of candles.

If it ſhould be ſaid, that people are apt to be obſtinately attached to old cuſtoms, and that it will be difficult to induce them to riſe before noon, conſequently my diſcovery can be of little uſe; I anſwer, *Nil deſperandum.* I believe all who have common ſenſe, as ſoon as they have learnt from this paper

that

that it is day-light when the ſun riſes, will contrive to riſe with him; and, to compel the reſt, I would propoſe the following regulations:

Firſt. Let a tax be laid of a louis per window, on every window that is provided with ſhutters to keep out the light of the ſun.

Second. Let the ſame ſalutary operation of police be made uſe of to prevent our burning candles, that inclined us laſt winter to be more œconomical in burning wood; that is, let guards be placed in the ſhops of the wax and tallow chandlers, and no family be permitted to be ſupplied with more than one pound of candles per week.

Third. Let guards alſo be poſted to ſtop all the coaches, &c. that would paſs the ſtreets after ſun-ſet, except thoſe of phyſicians, ſurgeons, and midwives.

Fourth. Every morning, as ſoon as the ſun riſes, let all the bells in every church

church be ſet ringing; and if that is not ſufficient, let cannon be fired in every ſtreet, to wake the ſluggards effectually, and make them open their eyes to ſee their true intereſt.

All the difficulty will be in the firſt two or three days; after which the reformation will be as natural and eaſy as the preſent irregularity: for *ce n'eſt que le premier pas qui coûte.* Oblige a man to riſe at four in the morning, and it is more than probable he will go willingly to bed at eight in the evening; and, having had eight hours ſleep, he will riſe more willingly at four the morning following. But this ſum of ninety ſix millions and ſeventy-five thouſand livres is not the whole of what may be ſaved by my œconomical project. You may obſerve, that I have calculated upon only one half of the year, and much may be ſaved in the other though the days are ſhorter. Beſides, the immenſe

ſtock

ſtock of wax and tallow left unconſumed during the ſummer, will probably make candles much cheaper for the enſuing winter, and continue cheaper as long as the propoſed reformation ſhall be ſupported.

For the great benefit of this diſcovery, thus freely communicated and beſtowed by me on the public, I demand neither place, penſion, excluſive privilege, nor any other reward whatever. I expect only to have the honour of it. And yet I know there are little envious minds who will, as uſual, deny me this, and ſay that my invention was known to the ancients; and perhaps they may bring paſſages out of the old books in proof of it. I will not diſpute with theſe people, that the ancients knew not that the ſun would riſe at certain hours; they poſſibly had, as we have, almanacks that predicted it: but it does not follow from thence that they knew *he gave light*

as

as ſoon as he roſe. This is what I claim as my diſcovery. If the ancients knew it, it muſt have been long ſince forgotten, for it certainly was unknown to the moderns, at leaſt to the Pariſians; which to prove, I need uſe but one plain ſimple argument. They are as well inſtructed, judicious, and prudent a people as exiſt any where in the world, all profeſſing, like myſelf, to be lovers of œconomy; and, from the many heavy taxes required from them by the neceſſities of the ſtate, have ſurely reaſon to be œconomical. I ſay it is impoſſible that ſo ſenſible a people, under ſuch circumſtances, ſhould have lived ſo long by the ſmoky, unwholeſome, and enormouſly expenſive light of candles, if they had really known that they might have had as much pure light of the ſun for nothing. I am, &c.

AN ABONNE.

ON

ON MODERN INNOVATIONS IN THE ENGLISH LANGUAGE AND IN PRINTING.

To NOAH WEBSTER, *jun. Esq. at* HARTFORD.

Philadelphia, Dec. 26, 1789.

DEAR SIR,

I RECEIVED, some time since, your *Dissertations on the English Language.* It is an excellent work, and will be greatly useful in turning the thoughts of our countrymen to correct writing. Please to accept my thanks for it, as well as for the great honour you have done me in its dedication. I ought to have made this acknowledgment sooner, but much indisposition prevented me.

I cannot but applaud your zeal for preserving the purity of our language both in its expression and pronunciation,

and in correcting the popular errors ſeveral of our ſtates are continually falling into with reſpect to both. Give me leave to mention ſome of them, though poſſibly they may already have occurred to you. I wiſh, however, that in ſome future publication of yours you would ſet a diſcountenancing mark upon them. The firſt I remember, is the word *improved*. When I left New England in the year 1723, this word had never been uſed among us, as far as I know, but in the ſenſe of *ameliorated*, or *made better*, except once in a very old book of Dr. Mather's, entitled *Remarkable Providences*. As that man wrote a very obſcure hand, I remember that when I read that word in his book, uſed inſtead of the word *employed*, I conjectured that it was an error of the printer, who had miſtaken a ſhort *l* in the writing for an *r*, and a *y* with too ſhort a tail for a *v*, whereby *employed* was converted into *improved*:

improved: but when I returned to Boſton in 1733, I found this change had obtained favour, and was then become common; for I met with it often in peruſing the newſpapers, where it frequently made an appearance rather ridiculous. Such, for inſtance, as the advertiſement of a country houſe to be ſold, which had been many years *improved* as a tavern; and in a character of a deceaſed country gentleman, that he had been, for more than thirty years, *improved* as a juſtice of the peace. This uſe of the word *improve* is peculiar to New England, and not to be met with among any other ſpeakers of Engliſh, either on this or the other ſide of the water.

During my late abſence in France, I find that ſeveral other new words have been introduced into our parliamentary language. For example, I find a verb formed from the ſubſtantive *notice*. *I ſhould not have* noticed *this, were it not*

that

that the gentleman, &c. Alſo another verb, from the ſubſtantive *advocate*; *The gentleman who* advocates, *or who has* advocated *that motion,* &c. Another from the ſubſtantive *progreſs*, the moſt awkward and abominable of the three: *The committee having* progreſſed, *reſolved to adjourn.* The word *oppoſed*, though not a new word, I find uſed in a new manner, as, *The gentlemen who are* oppoſed *to this meaſure, to which I have alſo myſelf always been* oppoſed. If you ſhould happen to be of my opinion with reſpect to theſe innovations, you will uſe your authority in reprobating them.

The Latin language, long the vehicle uſed in diſtributing knowledge among the different nations of Europe, is daily more and more neglected; and one of the modern tongues, viz. French, ſeems, in point of univerſality to have ſupplied its place. It is ſpoken in all the courts of Europe; and moſt of the lite-

rati, thoſe even who do not ſpeak it, have acquired enough knowledge of it to enable them eaſily to read the books that are written in it. This gives a conſiderable advantage to that nation. It enables its authors to inculcate and ſpread through other nations, ſuch ſentiments and opinions, on important points, as are moſt conducive to its intereſts, or which may contribute to its reputation, by promoting the common intereſts of mankind. It is, perhaps, owing to its being written in French, that Voltaire's Treatiſe on Toleration has had ſo ſudden and ſo great an effect on the bigotry of Europe, as almoſt entirely to diſarm it. The general uſe of the French language has likewiſe a very advantageous effect on the profits of the bookſelling branch of commerce; it being well known, that the more copies can be ſold that are ſtruck off from one compoſition of types, the profits increaſe in a much greater proportion

portion than they do in making a greater number of pieces in any other kind of manufacture. And at preſent there is no capital town in Europe without a French bookſeller's ſhop correſponding with Paris. Our Engliſh bids fair to obtain the ſecond place. The great body of excellent printed ſermons in our language, and the freedom of our writings on political ſubjects, have induced a great number of divines of different ſects and nations, as well as gentlemen concerned in public affairs, to ſtudy it, ſo far at leaſt as to read it. And if we were to endeavour the facilitating its progreſs, the ſtudy of our tongue might become much more general. Thoſe who have employed ſome part of their time in learning a new language, muſt have frequently obſerved, that while their acquaintance with it was imperfect difficulties, ſmall in themſelves, operated as great ones in obſtructing their pro-

greſs. A book, for example, ill printed, or a pronunciation in ſpeaking not well articulated, would render a ſentence unintelligible, which from a clear print, or a diſtinct ſpeaker, would have been immediately comprehended. If, therefore, we would have the benefit of ſeeing our language more generally known among mankind, we ſhould endeavour to remove all the difficulties, however ſmall, that diſcourage the learning of it. But I am ſorry to obſerve that, of late years, thoſe difficulties, inſtead of being diminiſhed, have been augmented.

In examining the Engliſh books that were printed between the reſtoration and the acceſſion of George the Second, we may obſerve, that all ſubſtantives were begun with a capital, in which we imitated our mother tongue, the German. This was more particularly uſeful to thoſe who were not well acquainted with the Engliſh, there being ſuch a prodigious

number of our words that are both verbs and ſubſtantives, and ſpelt in the ſame manner, though often accented differently in pronunciation. This method has, by the fancy of printers, of late years been entirely laid aſide; from an idea, that ſuppreſſing the capitals ſhews the character to greater advantage; thoſe letters, prominent above the line, diſturbing its even, regular appearance. The effect of this change is ſo conſiderable, that a learned man of France, who uſed to read our books, though not perfectly acquainted with our language, in converſation with me on the ſubject of our authors, attributed the greater obſcurity he found in our modern books, compared with thoſe of the period above mentioned, to a change of ſtyle for the worſe in our writers; of which miſtake I convinced him, by marking for him each ſubſtantive with a capital, in a paragraph, which he

then eaſily underſtood, though before he could not comprehend it. This ſhews the inconvenience of that pretended improvement.

From the ſame fondneſs for an uniform and even appearance of characters in the line, the printers have of late baniſhed alſo the Italic types, in which words of importance to be attended to in the ſenſe of the ſentence, and words on which an emphaſis ſhould be put in reading, uſed to be printed. And lately another fancy has induced other printers to uſe the round *s* inſtead of the long one, which formerly ſerved well to diſtinguiſh a word readily by its varied appearance. Certainly the omitting this prominent letter makes a line appear more even, but renders it leſs immediately legible; as the paring of all men's noſes might ſmooth and level their faces, but would render their phyſiognomies leſs diſtinguiſhable. Add to all theſe improvements backwards,

another

another modern fancy, that *grey* printing is more beautiful than black. Hence the Engliſh new books are printed in ſo dim a character as to be read with difficulty by old eyes, unleſs in a very ſtrong light, and with good glaſſes. Whoever compares a volume of the Gentleman's Magazine, printed between the years 1731 and 1740, with one of thoſe printed in the laſt ten years, will be convinced of the much greater degree of perſpicuity given by black than by the grey. Lord Cheſterfield pleaſantly remarked this difference to Faulkener, the Printer of the Dublin Journal, who was vainly making encomiums on his own paper, as the moſt complete of any in the world. "But, Mr. Faulkener," ſays my lord, "don't you think it might "be ſtill farther improved, by uſing "paper and ink not quite ſo near of "a colour?"—For all theſe reaſons I cannot but wiſh that our American

printers would, in their editions, avoid theſe fancied improvements, and thereby render their works more agreeable to foreigners in Europe, to the great advantage of our bookſelling commerce.

Farther, to be more ſenſible of the advantage of clear and diſtinct printing, let us conſider the aſſiſtance it affords in reading well aloud to an auditory. In ſo doing the eye generally ſlides forward three or four words before the voice. If the ſight clearly diſtinguiſhes what the coming words are, it gives time to order the modulation of the voice to expreſs them properly. But if they are obſcurely printed, or diſguiſed by omitting the capitals and long *ſ*'s, or otherwiſe, the reader is apt to modulate wrong; and, finding he has done ſo, he is obliged to go back and begin the ſentence again; which leſſens the pleaſure of the hearers. This leads me to mention an old error in our mode of printing. We are ſenſible

that

that when a queſtion is met with in the reading, there is a proper variation to be uſed in the management of the voice. We have, therefore, a point, called an interrogation, affixed to the queſtion, in order to diſtinguiſh it. But this is abſurdly placed at its end, ſo that the reader does not diſcover it till he finds that he has wrongly modulated his voice, and is therefore obliged to begin again the ſentence. To prevent this, the Spaniſh Printers, more ſenſibly, place an interrogation at the beginning as well as at the end of the queſtion. We have another error of the ſame kind in printing plays, where ſomething often occurs that is marked as ſpoken *aſide*. But the word *aſide* is placed at the end of the ſpeech, when it ought to precede it, as a direction to the reader, that he may govern his voice accordingly. The practice of our ladies in meeting five or ſix together, to form little buſy parties, where

where each is employed in ſome uſeful work, while one reads to them, is ſo commendable in itſelf, that it deſerves the attention of authors and printers to make it as pleaſing as poſſible, both to the reader and hearers.

My beſt wiſhes attend you, being, with ſincere eſteem,

Sir,

Your moſt obedient and
very humble ſervant,

B. FRANKLIN.

AN

AN ACCOUNT OF THE HIGHEST COURT OF JUDICATURE IN PENNSYLVANIA, VIZ.

THE COURT OF THE PRESS.

Power of this court.

IT may receive and promulgate accuſations of all kinds, againſt all perſons and characters among the citizens of the ſtate, and even againſt all inferior courts; and may judge, ſentence, and condemn to infamy, not only private individuals, but public bodies, &c. with or without enquiry or hearing, at the court's diſcretion.

In whoſe favour, or for whoſe emolument, this court is eſtabliſhed.

In favour of about one citizen in five hundred, who, by education, or practice in

in ſcribbling, has acquired a tolerable ſtyle as to grammar and conſtruction, ſo as to bear printing: or who is poſſeſſed of a preſs and a few types. This five hundredth part of the citizens have the privilege of accuſing and abuſing the other four hundred and ninety-nine parts at their pleaſure; or they may hire out their pens and preſs to others, for that purpoſe.

Practice of this court.

It is not governed by any of the rules of the common courts of law. The accuſed is allowed no grand jury to judge of the truth of the accuſation before it is publicly made; nor is the name of the accuſer made known to him; nor has he an opportunity of confronting the witneſſes againſt him, for they are kept in the dark, as in the Spaniſh court of inquiſition. Nor is there any petty jury of his peers ſworn

to

to try the truth of the charges. The proceedings are alſo ſometimes ſo rapid, that an honeſt good citizen may find himſelf ſuddenly and unexpectedly accuſed, and in the ſame morning judged and condemned, and ſentence pronounced againſt him that he is a rogue and a villain. Yet if an officer of this court receives the ſlighteſt check for miſconduct in this his office, he claims immediately the rights of a free citizen by the conſtitution, and demands to know his accuſer, to confront the witneſſes, and to have a fair trial by a jury of his peers.

The foundation of its authority.

It is ſaid to be founded on an article in the ſtate conſtitution, which eſtabliſhes the liberty of the preſs——a liberty which every Pennſylvanian would fight and die for, though few of us, I believe, have diſtinct ideas of its nature and extent.

extent. It ſeems, indeed, ſomewhat like the liberty of the preſs, that felons have by the common law of England before conviction; that is to be either preſſed to death or hanged. If, by the liberty of the preſs, were underſtood merely the liberty of diſcuſſing the propriety of public meaſures and political opinions, let us have as much of it as you pleaſe; but if it means the liberty of affronting, calumniating, and defaming one another, I, for my part, own myſelf willing to part with my ſhare of it, whenever our legiſlators ſhall pleaſe ſo to alter the law; and ſhall cheerfully conſent to exchange my liberty of abuſing others, for the privilege of not being abuſed myſelf.

By whom this court is commiſſioned or conſtituted.

It is not by any commiſſion from the ſupreme executive council, who might previouſly

previouſly judge of the abilities, integrity, knowledge, &c. of the perſons to be appointed to this great truſt, of deciding upon the characters and good fame of the citizens; for this court is above that council, and may accuſe, judge, and condemn it at pleaſure. Nor is it hereditary, as is the court of dernier reſſort in the peerage of England. But any man who can procure pen, ink, and paper, with a preſs, a few types, and a huge pair of blacking balls, may commiſſionate himſelf, and his court is immediately eſtabliſhed in the plenary poſſeſſion and exerciſe of its rights. For if you make the leaſt complaint of the judge's conduct, he dabs his blacking-balls in your face wherever he meets you; and, beſides tearing your private character to ſplinters, marks you out for the odium of the public, as an enemy to the liberty of the preſs.

Of

Of the natural ſupport of this court.

Its ſupport is founded in the depravity of ſuch minds as have not been mended by religion, nor improved by good education.

There is a luſt in man no charm can tame,
Of loudly publiſhing his neighbour's ſhame.

Hence,

On eagle's wings, immortal, ſcandals fly,
While virtuous actions are but born and die.

DRYDEN.

Whoever feels pain in hearing a good character of his neighbour, will feel a pleaſure in the reverſe. And of thoſe who, deſpairing to riſe to diſtinction by their virtues, are happy if others can be depreſſed to a level with themſelves, there are a number ſufficient in every great town to maintain one of theſe courts by their ſubſcription. A ſhrewd obſerver once ſaid, that in walking the ſtreets of

of a ſlippery morning, one might ſee where the good-natured people lived, by the aſhes thrown on the ice before the doors: probably he would have formed a different conjecture of the temper of thoſe whom he might find engaged in ſuch ſubſcriptions.

Of the checks proper to be eſtabliſhed againſt the abuſes of power in thoſe courts.

Hitherto there are none. But ſince ſo much has been written and publiſhed on the federal conſtitution; and the neceſſity of checks, in all other parts of good government, has been ſo clearly and learnedly explained, I find myſelf ſo far enlightened as to ſuſpect ſome check may be proper in this part alſo: but I have been at a loſs to imagine any that may not be conſtrued an infringement of the ſacred liberty of the preſs. At length, however, I think I

have found one, that, inſtead of diminiſhing general liberty, ſhall augment it; which is, by reſtoring to the people a ſpecies of liberty of which they have been deprived by our laws, I mean the liberty of the cudgel! In the rude ſtate of ſociety, prior to the exiſtence of laws, if one man gave another ill-language, the affronted perſon might return it by a box on the ear; and if repeated, by a good drubbing; and this without offending againſt any law: but now the right of making ſuch returns is denied, and they are puniſhed as breaches of the peace, while the right of abuſing ſeems to remain in full force; the laws made againſt it being rendered ineffectual by the liberty of the preſs.

My propoſal then is, to leave the liberty of the preſs untouched, to be exerciſed in its full extent, force, and vigour, but to permit the liberty of the cudgel to go with it *pari paſſu*. Thus, my

my fellow citizens, if an impudent writer attacks your reputation—dearer perhaps to you than your life—and puts his name to the charge, you may go to him as openly, and break his head. If he conceals himſelf behind the printer, and you can nevertheleſs diſcover who he is, you may in like manner way-lay him in the night, attack him behind, and give him a good drubbing. If your adverſary hires better writers than himſelf, to abuſe you more effectually, you may hire brawny porters, ſtronger than yourſelf, to aſſiſt you in giving him a more effectual drubbing. Thus far goes my project, as to *private* reſentment and retribution. But if the public ſhould ever happen to be affronted, as it ought to be, with the conduct of ſuch writers, I would not adviſe proceeding immediately to theſe extremities, but that we ſhould in moderation content ourſelves

with tarring and feathering, and toſſing them in a blanket.

If, however, it ſhould be thought that this propoſal of mine may diſturb the public peace, I would then humbly recommend to our legiſlators to take up the conſideration of both liberties, that of the preſs, and that of the cudgel; and by an explicit law mark their extent and limits: and at the ſame time that they ſecure the perſon of a citizen from aſſaults, they will likewiſe provide for the ſecurity of his reputation.

PAPER:

PAPER: *A POEM.*

SOME wit of old—ſuch wits of old there were—
Whoſe hints ſhow'd meaning, whoſe alluſions care,
By one brave ſtroke to mark all human kind,
Call'd clear blank paper ev'ry infant mind;
When ſtill, as opening ſenſe her dictates wrote,
Fair virtue put a ſeal, or vice a blot.

The thought was happy, pertinent, and true;
Methinks a genius might the plan purſue.
I (can you pardon my preſumption?) I—
No wit, no genius, yet for once will try.

Various the papers various wants produce,
The wants of faſhion, elegance, and uſe.
Men are as various; and, if right I ſcan,
Each ſort of *paper* repreſents ſome *man*.

Pray note the fop—half powder and half lace—
Nice, as a bandbox were his dwelling-place:
He's the *gilt-paper*, which apart you ſtore,
And lock from vulgar hands in the 'ſcritoire.

Mechanics, ſervants, farmers, and ſo forth,
Are *copy-paper*, of inferior worth;
Leſs priz'd, more uſeful, for your deſk decreed,
Free to all pens, and prompt at every need.

The wretch whom av'rice bids to pinch and ſpare,
Starve, cheat, and pilfer, to enrich an heir,
Is courſe *brown-paper*; ſuch as pedlars chooſe
To wrap up wares, which better men will uſe.

Take next the miſer's contraſt, who deſtroys
Health, fame, and fortune, in a round of joys.
Will any paper match him? Yes, throughout,
He's a true *ſinking-paper*, paſt all doubt.

The retail politician's anxious thought
Deems *this* ſide always right, and *that* ſtark nought;

He

He foams with cenſure; with applauſe he raves—
A dupe to rumours, and a tool of knaves;
He'll want no type his weakneſs to proclaim,
While ſuch a thing as *fools-cap* has a name.

The haſty gentleman, whoſe blood runs high,
Who picks a quarrel, if you ſtep awry,
Who can't a jeſt, a hint, or look endure:
What is he? What? *Touch-paper*, to be ſure.

What are our poets, take them as they fall,
Good, bad, rich, poor, much read, not read at all?
Them and their works in the ſame claſs you'll find;
They are the mere *waſte-paper* of mankind.

Obſerve the maiden, innocently ſweet,
She's fair *white-paper*, an unſullied ſheet;
On which the happy man whom fate ordains,
May write his *name*, and take her for his pains.

One inſtance more, and only one I'll bring;
'Tis the *great man* who ſcorns a little thing,

Whoſe thoughts, whoſe deeds, whoſe maxims
are his own,
Form'd on the feelings of his heart alone:
True genuine *royal-paper* is his breaſt;
Of all the kinds, moſt precious, pureſt, beſt

ON

ON THE ART OF SWIMMING.

*In anſwer to ſome enquiries of M. Dubourg * on the ſubject.*

I AM apprehenſive that I ſhall not be able to find leiſure for making all the diſquiſitions and experiments which would be deſirable on this ſubject. I muſt, therefore, content myſelf with a few remarks.

The ſpecific gravity of ſome human bodies, in compariſon to that of water, has been examined by Mr. Robinſon, in our Philoſophical Tranſactions, volume 50, page 30, for the year 1757. He aſſerts, that fat perſons with ſmall bones float moſt eaſily upon water.

* Tranſlator of Dr. Franklin's works into French.

The

The diving bell is accurately deſcribed in our Tranſactions.

When I was a boy, I made two oval pallets, each about ten inches long, and ſix broad, with a hole for the thumb, in order to retain it faſt in the palm of my hand. They much reſemble a painter's pallets. In ſwimming I puſhed the edges of theſe forward, and I ſtruck the water with their flat ſurfaces as I drew them back. I remember I ſwam faſter by means of theſe pallets, but they fatigued my wriſts.—I alſo fitted to the ſoles of my feet a kind of ſandals; but I was not ſatisfied with them, becauſe I obſerved that the ſtroke is partly given by the inſide of the feet and the ancles, and not entirely with the ſoles of the feet.

We have here waiſtcoats for ſwimming, which are made of double ſail-cloth, with ſmall pieces of cork quilted in between them.

I know

I know nothing of the *ſcaphandre* of M. de la Chapelle.

I know by experience that it is a great comfort to a ſwimmer, who has a conſiderable diſtance to go, to turn himſelf ſometimes on his back, and to vary in other reſpects the means of procuring a progreſſive motion.

When he is ſeized with the cramp in the leg, the method of driving it away, is to give to the parts affected a ſudden, vigorous, and violent ſhock; which he may do in the air as he ſwims on his back.

During the great heats of ſummer there is no danger in bathing, however warm we may be, in rivers which have been thoroughly warmed by the ſun. But to throw oneſelf into cold ſpring water, when the body has been heated by exerciſe in the ſun, is an imprudence which may prove fatal. I once knew an inſtance of four young men, who, having

having worked at harveſt in the heat of the day, with a view of refreſhing themſelves plunged into a ſpring of cold water: two died upon the ſpot, a third the next morning, and the fourth recovered with great difficulty. A copious draught of cold water, in ſimilar circumſtances, is frequently attended with the ſame effect in North America.

The exerciſe of ſwimming is one of the moſt healthy and agreeable in the world. After having ſwam for an hour or two in the evening, one ſleeps coolly the whole night, even during the moſt ardent heat of ſummer. Perhaps the pores being cleanſed, the inſenſible perſpiration increaſes, and occaſions this coolneſs.—It is certain that much ſwimming is the means of ſtopping a diarrhœa, and even of producing a conſtipation. With reſpect to thoſe who do not know how to ſwim, or who are affected with a diarrhœa at a ſeaſon which does not

not permit them to uſe that exerciſe, a warm bath, by cleanſing and purifying the ſkin, is found very ſalutary, and often effects a radical cure. I ſpeak from my own experience, frequently repeated, and that of others to whom I have recommended this.

You will not be diſpleaſed if I conclude theſe haſty remarks by informing you, that as the ordinary method of ſwimming is reduced to the act of rowing with the arms and legs, and is conſequently a laborious and fatiguing operation when the ſpace of water to be croſſed is conſiderable; there is a method in which a ſwimmer may paſs to great diſtances with much facility, by means of a ſail. This diſcovery I fortunately made by accident, and in the following manner.

When I was a boy I amuſed myſelf one day with flying a paper kite; and approaching the bank of a pond, which

was near a mile broad, I tied the ſtring to a ſtake, and the kite aſcended to a very conſiderable height above the pond, while I was ſwimming. In a little time, being deſirous of amuſing myſelf with my kite, and enjoying at the ſame time the pleaſure of ſwimming, I returned; and looſing from the ſtake the ſtring with the little ſtick which was faſtened to it, went again into the water, where I found, that, lying on my back and holding the ſtick in my hands, I was drawn along the ſurface of the water in a very agreeable manner. Having then engaged another boy to carry my clothes round the pond, to a place which I pointed out to him on the other ſide, I began to croſs the pond with my kite, which carried me quite over without the leaſt fatigue, and with the greateſt pleaſure imaginable. I was only obliged occaſionally to halt a little in my courſe, and reſiſt its progreſs, when it appeared that, by following too

quick, I lowered the kite too much; by doing which occaſionally I made it riſe again.—I have never ſince that time practiſed this ſingular mode of ſwimming, though I think it not impoſſible to croſs in this manner from Dover to Calais. The packet-boat, however, is ſtill preferable.

NEW

NEW MODE OF BATHING.

EXTRACTS OF LETTERS TO M. DUBOURG.

London, July 28, 1768.

I GREATLY approve the epithet which you give, in your letter of the 8th of June, to the new method of treating the ſmall-pox, which you call the *tonic* or bracing method; I will take occaſion, from it, to mention a practice to which I have accuſtomed myſelf. You know the cold bath has long been in vogue here as a tonic; but the ſhock of the cold water has always appeared to me, generally ſpeaking, as too violent, and I have found it much more agreeable to my conſtitution to bathe in another element, I mean cold air. With this view I riſe

I riſe early almoſt every morning, and ſit in my chamber without any clothes whatever, half an hour or an hour, according to the ſeaſon, either reading or writing. This practice is not in the leaſt painful, but, on the contrary, agreeable; and if I return to bed afterwards, before I dreſs myſelf, as ſometimes happens, I make a ſupplement of my night's reſt of one or two hours of the moſt pleaſing ſleep that can be imagined. I find no ill conſequences whatever reſulting from it, and that at leaſt it does not injure my health, if it does not in fact contribute much to its preſervation.—I ſhall therefore call it for the future a *bracing* or *tonic* bath.

March 10, 1793.

I ſhall not attempt to explain why damp clothes occaſion colds, rather than wet ones, becauſe I doubt the fact; I imagine that neither the one nor the

other contribute to this effect, and that the cauſes of colds are totally independent of wet and even of cold. I propoſe writing a ſhort paper on this ſubject, the firſt moment of leiſure I have at my diſpoſal.—In the mean time I can only ſay, that, having ſome ſuſpicions that the common notion, which attributes to cold the property of ſtopping the pores and obſtructing perſpiration, was ill founded, I engaged a young phyſician, who is making ſome experiments with Sanctorius's balance, to eſtimate the different proportions of his perſpiration, when remaining one hour quite naked, and another warmly clothed. He purſued the experiment in this alternate manner for eight hours ſucceſſively, and found his perſpiration almoſt double during thoſe hours in which he was naked.

OBSERVATIONS ON THE GENERALLY PREVAILING DOCTRINES OF LIFE AND DEATH.

To the ſame.

YOUR obſervations on the cauſes of death, and the experiments which you propoſe for recalling to life thoſe who appear to be killed by lightning, demonſtrate equally your ſagacity and humanity. It appears that the doctrines of life and death, in general, are yet but little underſtood.

A toad buried in ſand will live, it is ſaid, until the ſand becomes petrified; and then, being incloſed in the ſtone, it may ſtill live for we know not how many ages. The facts which are cited in ſupport of this opinion, are too numerous

and too circumſtantial not to deſerve a certain degree of credit. As we are accuſtomed to ſee all the animals with which we are acquainted eat and drink, it appears to us difficult to conceive how a toad can be ſupported in ſuch a dungeon. But if we reflect, that the neceſſity of nouriſhment, which animals experience in their ordinary ſtate, proceeds from the continual waſte of their ſubſtance by perſpiration; it will appear leſs incredible, that ſome animals in a torpid ſtate, perſpiring leſs becauſe they uſe no exerciſe, ſhould have leſs need of aliment; and that others, which are covered with ſcales or ſhells, which ſtop perſpiration, ſuch as land and ſea turtles, ſerpents, and ſome ſpecies of fiſh, ſhould be able to ſubſiſt a conſiderable time without any nouriſhment whatever.—A plant, with its flowers, fades and dies immediately, if expoſed to the air without having its roots immerſed in a humid ſoil, from which

which it may draw a ſufficient quantity of moiſture, to ſupply that which exhales from its ſubſtance, and is carried off continually by the air. Perhaps, however, if it were buried in quickſilver, it might preſerve, for a conſiderable ſpace of time, its vegetable life, its ſmell and colour. If this be the caſe, it might prove a commodious method of tranſporting from diſtant countries thoſe delicate plants which are unable to ſuſtain the inclemency of the weather at ſea, and which require particular care and attention.

I have ſeen an inſtance of common flies preſerved in a manner ſomewhat ſimilar. They had been drowned in Madeira wine, apparently about the time when it was bottled in Virginia to be ſent to London. At the opening of one of the bottles, at the houſe of a friend where I was, three drowned flies fell into the firſt glaſs which was filled. Having

heard it remarked that drowned flies were capable of being revived by the rays of the ſun, I propoſed making the experiment upon theſe. They were therefore expoſed to the ſun, upon a ſieve which had been employed to ſtrain them out of the wine. In leſs than three hours two of them began by degrees to recover life. They commenced by ſome convulſive motions in the thighs, and at length they raiſed themſelves upon their legs, wiped their eyes with their fore feet, beat and bruſhed their wings with their hind feet, and ſoon after began to fly, finding themſelves in Old England, without knowing how they came thither. The third continued lifeleſs until ſun-ſet, when, loſing all hopes of him, he was thrown away.

I wiſh it were poſſible, from this inſtance, to invent a method of embalming drowned perſons, in ſuch a manner that they might be recalled to life at any period, however

however diſtant; for, having a very ardent deſire to ſee and obſerve the ſtate of America an hundred years hence, I ſhould prefer, to an ordinary death, the being immerſed in a caſk of Madeira wine, with a few friends, until that time, then to be recalled to life by the ſolar warmth of my dear country. But ſince, in all probability, we live in an age too early, and too near the infancy of ſcience, to ſee ſuch an art brought in our time to its perfection; I muſt, for the preſent, content myſelf with the treat, which you are ſo kind as to promiſe me, of the reſurrection of a fowl or a turkey-cock.

PRECAUTIONS *to be uſed by thoſe who are about to undertake* A SEA VOYAGE.

WHEN you intend to take a long voyage, nothing is better than to keep it a ſecret till the moment of your departure. Without this, you will be continually interrupted and tormented by viſits from friends and acquaintances, who not only make you loſe your valuable time, but make you forget a thouſand things which you wiſh to remember; ſo that when you are embarked, and fairly at ſea, you recollect, with much uneaſineſs, affairs which you have not terminated, accounts that you have not ſettled, and a number of things which you propoſed to carry with you, and which you find the want of every moment. Would it not be attended

with the beſt conſequences to reform ſuch a cuſtom, and to ſuffer a traveller, without deranging him, to make his preparations in quietneſs, to ſet apart a few days, when theſe are finiſhed, to take leave of his friends, and to receive their good wiſhes for his happy return?

It is not always in one's power to chooſe a captain; though great part of the pleaſure and happineſs of the paſſage depends upon this choice, and though one muſt for a time be confined to his company, and be in ſome meaſure under his command. If he is a ſocial ſenſible man, obliging, and of a good diſpoſition, you will be ſo much the happier. One ſometimes meets with people of this deſcription, but they are not common: however, if yours be not of this number, if he be a good ſeaman, attentive, careful, and active in the management of his veſſel, you muſt diſpenſe with the reſt, for theſe are the moſt eſſential qualities.

Whatever

Whatever right you may have, by your agreement with him, to the provisions he has taken on board for the use of the passengers, it is always proper to have some private store, which you may make use of occasionally. You ought, therefore, to provide good water, that of the ship being often bad: but you must put it into bottles, without which you cannot expect to preserve it sweet. You ought also to carry with you good tea, ground coffee, chocolate, wine of that sort which you like best, cyder, dried raisins, almonds, sugar, capillaire, citrons, rum, eggs dipped in oil, portable soup, bread twice baked. With regard to poultry, it is almost useless to carry any with you, unless you resolve to undertake the office of feeding and fattening them yourself. With the little care which is taken of them on board ship, they are almost all sickly, and their flesh is as tough as leather.

All ſailors entertain an opinion, which has undoubtedly originated formerly from a want of water, and when it has been found neceſſary to be ſparing of it, that poultry never know when they have drunk enough; and that when water is given them at diſcretion, they generally kill themſelves by drinking beyond meaſure. In conſequence of this opinion, they give them water only once in two days, and even then in ſmall quantities: but as they pour this water into troughs inclining on one ſide, which occaſions it to run to the lower part, it thence happens that they are obliged to mount one upon the back of another in order to reach it; and there are ſome which cannot even dip their beaks in it. Thus continually tantalized and tormented by thirſt, they are unable to digeſt their food, which is very dry, and they ſoon fall ſick and die. Some of them are found thus every morning, and are thrown

thrown into the ſea; whilſt thoſe which are killed for the table are ſcarcely fit to be eaten. To remedy this inconvenience, it will be neceſſary to divide their troughs into ſmall compartments, in ſuch a manner that each of them may be capable of containing water; but this is ſeldom or never done. On this account, ſheep and hogs are to be conſidered as the beſt freſh proviſion that one can have at ſea; mutton there being in general very good, and pork excellent.

It may happen that ſome of the proviſions and ſtores which I have recommended may become almoſt uſeleſs, by the care which the captain has taken to lay in a proper ſtock; but in ſuch a caſe you may diſpoſe of it to relieve the poor paſſengers, who, paying leſs for their paſſage, are ſtowed among the common ſailors, and have no right to the captain's proviſions, except ſuch part of them as is uſed for feeding the crew. Theſe paſ-

ſengers

ſengers are ſometimes ſick, melancholy, and dejected; and there are often women and children among them, neither of whom have any opportunity of procuring thoſe things which I have mentioned, and of which, perhaps, they have the greateſt need. By diſtributing amongſt them a part of your ſuperfluity, you may be of the greateſt aſſiſtance to them. You may reſtore their health, ſave their lives, and in ſhort render them happy; which always affords the livelieſt ſenſation to a feeling mind.

The moſt diſagreeable thing at ſea is the cookery; for there is not, properly ſpeaking, any profeſſed cook on board. The worſt ſailor is generally choſen for that purpoſe, who for the moſt part is equally dirty. Hence comes the proverb uſed among the Engliſh ſailors, that *God ſends meat, and the Devil ſends cooks.* Thoſe, however, who have a better opinion of Providence, will think otherwiſe.

otherwiſe. Knowing that ſea air, and the exerciſe or motion which they receive from the rolling of the ſhip, have a wonderful effect in whetting the appetite, they will ſay, that Providence has given ſailors bad cooks to prevent them from eating too much; or that, knowing they would have bad cooks, he has given them a good appetite to prevent them from dying with hunger. However, if you have no confidence in theſe ſuccours of Providence, you may yourſelf, with a lamp and a boiler, by the help of a little ſpirits of wine, prepare ſome food, ſuch as ſoup, haſh, &c. A ſmall oven made of tin-plate is not a bad piece of furniture: your ſervant may roaſt in it a piece of mutton or pork. If you are ever tempted to eat ſalt beef, which is often very good, you will find that cyder is the beſt liquor to quench the thirſt generally cauſed by ſalt meat or ſalt fiſh. Sea biſcuit, which is too hard

hard for the teeth of ſome people, may be ſoftened by ſteeping it; but bread double-baked is the beſt; for, being made of good loaf-bread cut into ſlices, and baked a ſecond time, it readily imbibes water, becomes ſoft, and is eaſily digeſted: it conſequently forms excellent nouriſhment, much ſuperior to that of biſcuit, which has not been fermented.

I muſt here obſerve, that this double-baked bread was originally the real biſcuit prepared to keep at ſea; for the word *biſcuit*, in French, ſignifies twice baked *. Peaſe often boil badly, and do not become ſoft: in ſuch caſe, by putting a two-pound ſhot into the kettle, the rolling of the veſſel, by means of this bullet, will convert the peaſe into a kind of porridge, like muſtard.

Having often ſeen ſoup, when put

* It is derived from *bis* again, and *cuit* baked.

upon

upon the table at ſea in broad flat diſhes, thrown out on every ſide by the rolling of the veſſel, I have wiſhed that our tin-men would make our ſoup-baſons with diviſions or compartments; forming ſmall plates, proper for containing ſoup for one perſon only. By this diſpoſition, the ſoup, in an extraordinary roll, would not be thrown out of the plate, and would not fall into the breaſts of thoſe who are at table, and ſcald them.—Having entertained you with theſe things of little importance, permit me now to conclude with ſome general reflections upon navigation.

When navigation is employed only for tranſporting neceſſary proviſions from one country, where they abound, to another where they are wanting; when by this it prevents famines, which were ſo frequent and ſo fatal before it was invented and became ſo common; we cannot help conſidering it as one of thoſe

arts

arts which contribute moſt to the happineſs of mankind.—But when it is employed to tranſport things of no utility, or articles merely of luxury, it is then uncertain whether the advantages reſulting from it are ſufficient to counterbalance the misfortunes it occaſions by expoſing the lives of ſo many individuals upon the vaſt ocean. And when it is uſed to plunder veſſels and tranſport ſlaves, it is evidently only the dreadful means of increaſing thoſe calamities which afflict human nature.

One is aſtoniſhed to think on the number of veſſels and men who are daily expoſed in going to bring tea from China, coffee from Arabia, and ſugar and tobacco from America; all commodities which our anceſtors lived very well without. The ſugar-trade employs nearly a thouſand veſſels; and that of tobacco almoſt the ſame number. With regard to the utility of tobacco, little

can be ſaid; and with regard to ſugar, how much more meritorious would it be to ſacrifice the momentary pleaſure which we receive from drinking it once or twice a-day in our tea, than to encourage the numberleſs cruelties that are continually exerciſed in order to procure it us!

A celebrated French moraliſt ſaid, that, when he conſidered the wars which we foment in Africa to get negroes; the great number who of courſe periſh in theſe wars; the multitude of thoſe wretches who die in their paſſage, by diſeaſe, bad air, and bad proviſions; and laſtly, how many periſh by the cruel treatment they meet with in a ſtate of ſlavery; when he ſaw a bit of ſugar, he could not help imagining it to be covered with ſpots of human blood. But, had he added to theſe conſiderations the wars which we carry on againſt one another, to take and retake the iſlands that produce

produce this commodity, he would not have ſeen the ſugar ſimply *ſpotted* with blood, he would have beheld it entirely tinged with it.

Theſe wars make the maritime powers of Europe, and the inhabitants of Paris and London, pay much dearer for their ſugar than thoſe of Vienna, though they are almoſt three hundred leagues diſtant from the ſea. A pound of ſugar, indeed, coſts the former not only the price which they give for it, but alſo what they pay in taxes, neceſſary to ſupport thoſe fleets and armies which ſerve to defend and protect the countries that produce it.

ON LUXURY, IDLENESS, AND INDUSTRY;

From a Letter to Benjamin Vaughan, Esq. written in* 1784.

IT is wonderful how prepoſterouſly the affairs of this world are managed. Naturally one would imagine, that the intereſt of a few individuals ſhould give way to general intereſt; but individuals manage their affairs with ſo much more application, induſtry, and addreſs, than the public do theirs, that general intereſt moſt commonly gives way to particular. We aſſemble parliaments and councils, to have the benefit of their collected wiſdom; but we neceſſarily have, at the ſame time, the inconvenience of their col-

* Peſent member of parliament for the borough of Calne, in Wiltſhire, between whom and our author there ſubſiſted a very cloſe friendſhip.

lected

lected paſſions, prejudices, and private intereſts. By the help of theſe, artful men overpower their wiſdom, and dupe its poſſeſſors: and if we may judge by the acts, arrets, and edicts, all the world over, for regulating commerce, an aſſembly of great men is the greateſt fool upon earth.

I have not yet, indeed, thought of a remedy for luxury. I am not ſure that in a great ſtate it is capable of a remedy; nor that the evil is in itſelf always ſo great as it is repreſented. Suppoſe we include in the definition of luxury all unneceſſary expence, and then let us conſider whether laws to prevent ſuch expence are poſſible to be executed in a great country; and whether, if they could be executed, our people generally would be happier, or even richer. Is not the hope of being one day able to purchaſe and enjoy luxuries a great ſpur to labour and induſtry? May not luxury

therefore produce more than it consumes, if, without such a spur, people would be, as they are naturally enough inclined to be, lazy and indolent? To this purpose I remember a circumstance. The skipper of a shallop, employed between Cape-May and Philadelphia, had done us some small service, for which he refused to be paid. My wife, understanding that he had a daughter, sent her a present of a new-fashioned cap. Three years after, this skipper being at my house with an old farmer of Cape-May, his passenger, he mentioned the cap, and how much his daughter had been pleased with it. "But (said he) it proved a "dear cap to our congregation."—"How so?"—"When my daughter "appeared with it at meeting, it was so "much admired, that all the girls re-"solved to get such caps from Phila-"delphia; and my wife and I com-"puted that the whole could not have

"coſt leſs than a hundred pounds."—"True (ſaid the farmer), but you do not "tell all the ſtory. I think the cap was "nevertheleſs an advantage to us; for "it was the firſt thing that put our girls "upon knitting worſted mittens for ſale "at Philadelphia, that they might have "wherewithal to buy caps and ribbons "there; and you know that that induſ-"try has continued, and is likely to "continue and increaſe to a much "greater value, and anſwer better pur-"poſes."—Upon the whole, I was more reconciled to this little piece of luxury, ſince not only the girls were made happier by having fine caps, but the Philadelphians by the ſupply of warm mittens.

In our commercial towns upon the ſea coaſt, fortunes will occaſionally be made. Some of thoſe who grow rich will be prudent, live within bounds, and preſerve what they have gained for their

poſterity: others, fond of ſhewing their wealth, will be extravagant, and ruin themſelves. Laws cannot prevent this: and perhaps it is not always an evil to the public. A ſhilling ſpent idly by a fool, may be picked up by a wiſer perſon, who knows better what to do with it. It is therefore not loſt. A vain ſilly fellow builds a fine houſe, furniſhes it richly, lives in it expenſively, and in a few years ruins himſelf: but the maſons, carpenters, ſmiths, and other honeſt tradeſmen, have been by his employ aſſiſted in maintaining and raiſing their families; the farmer has been paid for his labour, and encouraged; and the eſtate is now in better hands.—In ſome caſes, indeed, certain modes of luxury may be a public evil, in the ſame manner as it is a private one. If there be a nation, for inſtance, that exports its beef and linen, to pay for the importation of claret and porter, while a great part of its people

live

live upon potatoes, and wear no ſhirts; wherein does it differ from the ſot who lets his family ſtarve, and ſells his clothes to buy drink? Our American commerce is, I confeſs, a little in this way. We ſell our victuals to the iſlands for rum and ſugar; the ſubſtantial neceſſaries of life for ſuperfluities. But we have plenty, and live well nevertheleſs; though, by being ſoberer, we might be richer.

The vaſt quantity of foreſt land we have yet to clear, and put in order for cultivation, will for a long time keep the body of our nation laborious and frugal. Forming an opinion of our people and their manners by what is ſeen among the inhabitants of the ſea-ports, is judging from an improper ſample. The people of the trading towns may be rich and luxurious, while the country poſſeſſes all the virtues that tend to promote happineſs and public proſperity. Thoſe towns

towns are not much regarded by the country; they are hardly conſidered as an eſſential part of the ſtates; and the experience of the laſt war has ſhewn, that their being in the poſſeſſion of the enemy did not neceſſarily draw on the ſubjection of the country; which bravely continued to maintain its freedom and independence notwithſtanding.

It has been computed by ſome political arithmetician, that if every man and woman would work for four hours each day on ſomething uſeful, that labour would produce ſufficient to procure all the neceſſaries and comforts of life; want and miſery would be baniſhed out of the world, and the reſt of the twenty-four hours might be leiſure and pleaſure.

What occaſions then ſo much want and miſery? It is the employment of men and women in works that produce neither the neceſſaries nor conveniences

of

of life, who, with thoſe who do nothing, conſume neceſſaries raiſed by the laborious. To explain this:

The firſt elements of wealth are obtained by labour, from the earth and waters. I have land, and raiſe corn. With this if I feed a family that does nothing, my corn will be conſumed, and at the end of the year I ſhall be no richer than I was at the beginning. But if, while I feed them, I employ them, ſome in ſpinning, others in making bricks, &c. for building, the value of my corn will be arreſted and remain with me, and at the end of the year we may be all better clothed and better lodged. And if, inſtead of employing a man I feed in making bricks, I employ him in fiddling for me, the corn he eats is gone, and no part of his manufacture remains to augment the wealth and convenience of the family: I ſhall therefore be the poorer for this fiddling man, unleſs the reſt of my

my family work more, or eat leſs, to make up the deficiency he occaſions.

Look round the world, and ſee the millions employed in doing nothing, or in ſomething that amounts to nothing when the neceſſaries and conveniences of life are in queſtion. What is the bulk of commerce, for which we fight and deſtroy each other, but the toil of millions for ſuperfluities, to the great hazard and loſs of many lives by the conſtant dangers of the ſea? How much labour is ſpent in building and fitting great ſhips, to go to China and Arabia for tea and coffee, to the Weſt Indies or ſugar, to America for tobacco! Theſe things cannot be called the neceſſaries of life, for our anceſtors lived very comfortably without them.

A queſtion may be aſked: Could all theſe people now employed in raiſing, making, or carrying ſuperfluities, be ſubſiſted by raiſing neceſſaries? I think they

they might. The world is large, and a great part of it ſtill uncultivated. Many hundred millions of acres in Aſia, Africa, and America, are ſtill in a foreſt; and a great deal even in Europe. On a hundred acres of this foreſt a man might become a ſubſtantial farmer; and a hundred thouſand men employed in clearing each his hundred acres, would hardly brighten a ſpot big enough to be viſible from the moon, unleſs with Herſchel's teleſcope; ſo vaſt are the regions ſtill in wood.

It is however ſome comfort to reflect, that, upon the whole, the quantity of induſtry and prudence among mankind exceeds the quantity of idleneſs and folly. Hence the increaſe of good buildings, farms cultivated, and populous cities filled with wealth, all over Europe, which a few ages ſince were only to be found on the coaſts of the Mediterranean; and this notwithſtanding the mad

mad wars continually raging, by which are often deſtroyed in one year the works of many years peace. So that we may hope, the luxury of a few merchants on the coaſt will not be the ruin of America.

One reflection more, and I will end this long rambling letter. Almoſt all the parts of our bodies require ſome expence. The feet demand ſhoes; the legs ſtockings; the reſt of the body clothing; and the belly a good deal of victuals. Our eyes, though exceedingly uſeful, aſk, when reaſonable, only the cheap aſſiſtance of ſpectacles, which could not much impair our finances. But the eyes of other people are the eyes that ruin us. If all but myſelf were blind, I ſhould want neither fine clothes, fine houſes, nor fine furniture.

ON

ON THE SLAVE TRADE.

READING in the newſpapers the ſpeech of Mr. Jackſon in congreſs, againſt meddling with the affair of ſlavery, or attempting to mend the condition of ſlaves, it put me in mind of a ſimilar ſpeech, made about one hundred years ſince, by Sidi Mehemet Ibrahim, a member of the divan of Algiers, which may be ſeen in Martin's account of his conſulſhip, 1687. It was againſt granting the petition of the ſect called *Erika*, or *Puriſts*, who prayed for the abolition of piracy and ſlavery, as being unjuſt.—Mr. Jackſon does not quote it; perhaps he has not ſeen it. If, therefore, ſome of its reaſonings are to be found in his eloquent ſpeech, it may only ſhew that men's intereſts operate, and are operated on,

on, with ſurpriſing ſimilarity, in all countries and climates, whenever they are under ſimilar circumſtances. The African ſpeech, as tranſlated, is as follows:

"Alla Biſmillah, &c. God is great, and Mahomet is his prophet.

"Have theſe Erika conſidered the conſequences of granting their petition? If we ceaſe our cruiſes againſt the Chriſtians, how ſhall we be furniſhed with the commodities their countries produce, and which are ſo neceſſary for us? If we forbear to make ſlaves of their people, who, in this hot climate, are to cultivate our lands? Who are to perform the common labours of our city, and of our families? Muſt we not then be our own ſlaves? And is there not more compaſſion and more favour due to us Muſſulmen, than to thoſe Chriſtian dogs? We have now above fifty thouſand ſlaves in and near Algiers.

Algiers. This number, if not kept up by freſh ſupplies, will ſoon diminiſh, and be gradually annihilated. If, then, we ceaſe taking and plundering the infidel ſhips, and making ſlaves of the ſeamen and paſſengers, our lands will become of no value, for want of cultivation; the rents of houſes in the city will ſink one half; and the revenues of government, ariſing from the ſhare of prizes, muſt be totally deſtroyed.—And for what? To gratify the whim of a whimſical ſect, who would have us not only forbear making more ſlaves, but even manumit thoſe we have. But who is to indemnify their maſters for the loſs? Will the ſtate do it? Is our treaſury ſufficient? Will the Erika do it? Can they do it? Or would they, to do what they think juſtice to the ſlaves, do a greater injuſtice to the owners? And if we ſet our ſlaves free, what is to be done with them? Few of them will return to their native countries; they know too well the

greater hardſhips they muſt there be ſubject to. They will not embrace our holy religion: they will not adopt our manners: our people will not pollute themſelves by intermarrying with them. Muſt we maintain them as beggars in our ſtreets; or ſuffer our properties to be the prey of their pillage? for men accuſtomed to ſlavery will not work for a livelihood, when not compelled.—And what is there ſo pitiable in their preſent condition? Were they not ſlaves in their own countries? Are not Spain, Portugal, France, and the Italian ſtates, governed by deſpots, who hold all their ſubjects in ſlavery, without exception? Even England treats her ſailors as ſlaves; for they are, whenever the government pleaſes, ſeized and confined in ſhips of war, condemned not only to work, but to fight for ſmall wages, or a mere ſubſiſtence, not better than our ſlaves are allowed by us. Is their condition then made

made worſe by their falling into our hands? No; they have only exchanged one ſlavery for another; and I may ſay a better: for here they are brought into a land where the ſun of Iſlamiſm gives forth its light, and ſhines in full ſplendour, and they have an opportunity of making themſelves acquainted with the true doctrine, and thereby ſaving their immortal ſouls. Thoſe who remain at home, have not that happineſs. Sending the ſlaves home, then, would be ſending them out of light into darkneſs.

"I repeat the queſtion, What is to be done with them? I have heard it ſuggeſted, that they may be planted in the wilderneſs, where there is plenty of land for them to ſubſiſt on, and where they may flouriſh as a free ſtate.—But they are, I doubt, too little diſpoſed to labour without compulſion, as well as too ignorant to eſtabliſh good government: and the wild Arabs would ſoon

moleſt and deſtroy, or again enſlave them. While ſerving us, we take care to provide them with every thing; and they are treated with humanity. The labourers in their own countries are, as I am informed, worſe fed, lodged, and clothed. The condition of moſt of them therefore is already mended, and requires no farther improvement. Here their lives are in ſafety. They are not liable to be impreſſed for ſoldiers, and forced to cut one another's Chriſtian throats, as in the wars of their own countries. If ſome of the religious mad bigots, who now teaſe us with their ſilly petitions, have, in a fit of blind zeal, freed their ſlaves, it was not generoſity, it was not humanity, that moved them to the action; it was from the conſcious burthen of a load of ſins, and hope, from the ſuppoſed merits of ſo good a work, to be excuſed from damnation.—How groſsly are they miſtaken, in imagining

ſlavery

ſlavery to be diſavowed by the Alcoran! Are not the two precepts, to quote no more, "Maſters, treat your ſlaves with kindneſs—Slaves, ſerve your maſters with cheerfulneſs and fidelity," clear proofs to the contrary? Nor can the plundering of infidels be in that ſacred book forbidden; ſince it is well known from it, that God has given the world, and all that it contains, to his faithful Muſſulmen, who are to enjoy it, of right, as faſt as they can conquer it. Let us then hear no more of this deteſtable propoſition, the manumiſſion of Chriſtian ſlaves, the adoption of which would, by depreciating our lands and houſes, and thereby depriving ſo many good citizens of their properties, create univerſal diſcontent, and provoke inſurrections, to the endangering of government, and producing general confuſion. I have, therefore, no doubt that this wiſe council will prefer the comfort and happineſs

of a whole nation of true believers, to the whim of a few Erika, and diſmiſs their petition."

The reſult was, as Martin tells us, that the Divan came to this reſolution: "That the doctrine, that the plundering "and enſlaving the Chriſtians is unjuſt, "is at beſt problematical; but that it is "the intereſt of this ſtate to continue the "practice, is clear; therefore let the "petition be rejected."——And it was rejected accordingly.

And ſince like motives are apt to produce in the minds of men like opinions and reſolutions, may we not venture to predict, from this account, that the petitions to the parliament of England for aboliſhing the ſlave trade, to ſay nothing of other legiſlatures, and the debates upon them, will have a ſimilar concluſion?

HISTORICUS.

March 23, 1790.

OBSER.

OBSERVATIONS ON WAR.

BY the original law of nations, war and extirpation were the puniſhment of injury. Humanizing by degrees, it admitted ſlavery inſtead of death: a farther ſtep was, the exchange of priſoners inſtead of ſlavery: another, to reſpect more the property of private perſons under conqueſt, and be content with acquired dominion. Why ſhould not this law of nations go on improving? Ages have intervened between its ſeveral ſteps: but as knowledge of late increaſes rapidly, why ſhould not thoſe ſteps be quickened? Why ſhould it not be agreed to, as the future law of nations, that in any war hereafter the following deſcription of men ſhould be undiſturbed, have

the protection of both ſides, and be permitted to follow their employments in ſecurity? viz.

1. Cultivators of the earth, becauſe they labour for the ſubſiſtence of mankind.

2. Fiſhermen, for the ſame reaſon.

3. Merchants and traders in unarmed ſhips, who accommodate different nations by communicating and exchanging the neceſſaries and conveniences of life.

4. Artiſts and mechanics, inhabiting and working in open towns.

It is hardly neceſſary to add, that the hoſpitals of enemies ſhould be unmoleſted—they ought to be aſſiſted. It is for the intereſt of humanity in general, that the occaſions of war, and the inducements to it, ſhould be diminiſhed. If rapine be aboliſhed, one of the encouragements to war is taken away; and peace therefore more likely to continue and be laſting.

The

The practice of robbing merchants on the high seas—a remnant of the ancient piracy—though it may be accidentally beneficial to particular persons, is far from being profitable to all engaged in it, or to the nation that authorises it. In the beginning of a war some rich ships are surprised and taken. This encourages the first adventurers to fit out more armed vessels; and many others to do the same. But the enemy at the same time become more careful; arm their merchant ships better, and render them not so easy to be taken: they go also more under the protection of convoys. Thus, while the privateers to take them are multiplied, the vessels subject to be taken, and the chances of profit, are diminished; so that many cruises are made wherein the expences overgo the gains; and, as is the case in other lotteries, though particulars have got prizes, the mass of adventurers

are

are loſers, the whole expence of fitting out all the privateers during a war being much greater than the whole amount of goods taken.

Then there is the national loſs of all the labour of ſo many men during the time they have been employed in robbing; who beſides ſpend what they get, in riot, drunkenneſs, and debauchery; loſe their habits of induſtry; are rarely fit for any ſober buſineſs after a peace, and ſerve only to increaſe the number of highwaymen and houſebreakers. Even the undertakers who have been fortunate, are, by ſudden wealth, led into expenſive living, the habit of which continues when the means of ſupporting it ceaſe, and finally ruins them: a juſt puniſhment for their having wantonly and unfeelingly ruined many honeſt, innocent traders and their families, whoſe ſubſtance was employed in ſerving the common intereſt of mankind.

ON THE

IMPRESS OF SEAMEN.

Notes copied from Dr. Franklin's writing in pencil in the margin of Judge Foſter's celebrated argument in favour of the IMPRESSING OF SEAMEN (*publiſhed in the folio edition of his works*).

JUDGE Foſter, p. 158. "Every "Man."—The concluſion here from the *whole to a part*, does not ſeem to be good logic. If the alphabet ſhould ſay, Let us all fight for the defence of the whole; that is equal, and may therefore be juſt. But if they ſhould ſay, Let A B C and D go out and fight for us, while we ſtay at home and ſleep in whole ſkins; that is not equal, and therefore cannot be juſt.

Ib.

Ib. "Employ."—If you pleaſe. The word ſignifies engaging a man to work for me, by offering him ſuch wages as are ſufficient to induce him to prefer my ſervice. This is very different from compelling him to work on ſuch terms as I think proper.

Ib. "This ſervice and employment, "&c."—Theſe are falſe facts. His employments and ſervice are not the ſame. —Under the merchant he goes in an unarmed veſſel, not obliged to fight, but to tranſport merchandize. In the king's ſervice he is obliged to fight, and to hazard all the dangers of battle. Sickneſs on board of king's ſhips is alſo more common and more mortal. The merchant's ſervice too he can quit at the end of the voyage; not the king's. Alſo, the merchant's wages are much higher.

Ib. "I am very ſenſible, &c."—

Here

Here are two things put in compariſon that are not comparable: viz. injury to ſeamen, and inconvenience to trade. Inconvenience to the whole trade of a nation will not juſtify injuſtice to a ſingle ſeaman. If the trade would ſuffer without his ſervice, it is able and ought to be willing to offer him ſuch wages as may induce him to afford his ſervice voluntarily.

Page 159. "Private miſchief muſt be "borne with patience, for preventing a "national calamity."—Where is this maxim in law and good policy to be found? And how can that be a maxim which is not conſiſtent with common ſenſe? If the maxim had been, that private miſchiefs, which prevent a national calamity, ought to be generouſly compenſated by the nation, one might underſtand it: but that ſuch private miſchiefs are only to be borne with patience, is abſurd!

Ib. "The expedient, &c. And, &c." (Paragraphs 2 and 3).—Twenty ineffectual or inconvenient ſchemes will not juſtify one that is unjuſt.

Ib. "Upon the foot of, &c."—Your reaſoning, indeed, like a lie, ſtands but upon one *foot*; truth upon two.

Page 160. "Full wages."—Probably the ſame they had in the merchant's ſervice.

Page 174. "I hardly admit, &c." (Paragraph 5).—When this author ſpeaks of impreſſing, page 158, he diminiſhes the horror of the practice as much as poſſible, by preſenting to the mind one ſailor only ſuffering a "*hardſhip*" (as he tenderly calls it) in ſome "*particular caſes*" only; and he places againſt this private miſchief the inconvenience to the trade of the kingdom. —But if, as he ſuppoſes is often the caſe, the ſailor who is preſſed, and obliged

liged to ſerve for the defence of trade, at the rate of twenty-five ſhillings a month, could get three pounds fifteen ſhillings in the merchant's ſervice, you take from him fifty ſhillings a month; and if you have 100,000 in your ſervice, you rob this honeſt induſtrious part of ſociety and their poor families of 25,000l. per month, or three millions a year, and at the ſame time oblige them to hazard their lives in fighting for the defence of your trade; to the defence of which all ought indeed to contribute (and ſailors among the reſt) in proportion to their profits by it: but this three millions is more than their ſhare, if they did not pay with their perſons; but when you force that, methinks you ſhould excuſe the other.

But it may be ſaid, to give the king's ſeamen merchant's wages would coſt the nation too much, and call for more taxes.

The

The queſtion then will amount to this: whether it be juſt in a community, that the richer part ſhould compel the poorer to fight in defence of them and their properties, for ſuch wages as they think fit to allow, and puniſh them if they refuſe? Our author tells us that it is "*legal.*" I have not law enough to diſpute his authorities, but I cannot perſuade myſelf that it is equitable. I will, however, own for the preſent, that it may be lawful when neceſſary; but then I contend that it may be uſed ſo as to produce the ſame good effects—*the public ſecurity*—without doing ſo much intolerable injuſtice as attends the impreſſing common ſeamen.—In order to be better underſtood, I would premiſe two things: Firſt, that voluntary ſeamen may be had for the ſervice, if they were ſufficiently paid. The proof is, that to ſerve in the ſame ſhip, and incur the ſame dangers,

you

you have no occaſion to impreſs captains, lieutenants, ſecond lieutenants, midſhipmen, purſers, nor many other officers. Why, but that the profits of their places, or the emoluments expected, are ſufficient inducements? The buſineſs then is, to find money, by impreſſing, ſufficient to make the ſailors all volunteers, as well as their officers; and this without any freſh burthen upon trade.—The ſecond of my premiſes is, that twenty-five ſhillings a month, with his ſhare of the ſalt beef, pork, and peas-pudding, being found ſufficient for the ſubſiſtence of a hard-working ſeaman, it will certainly be ſo for a ſedentary ſcholar or gentleman. I would then propoſe to form a treaſury, out of which encouragements to ſeamen ſhould be paid. To fill this treaſury, I would impreſs a number of civil officers who at preſent have great ſalaries, oblige them to ſerve in

their reſpective offices for twenty-five ſhillings a month with their ſhares of meſs proviſions, and throw the reſt of their ſalaries into the ſeamen's treaſury. If ſuch a preſs-warrant were given me to execute, the firſt I would preſs ſhould be a Recorder of Briſtol, or a Mr. Juſtice Foſter, becauſe I might have need of his edifying example, to ſhew how much impreſſing ought to be borne with; for he would certainly find, that though to be reduced to twenty five ſhillings a month might be a "*private miſchief*," yet that, agreeably to his maxim of law and good policy, it "*ought to be borne with patience*," for preventing a national calamity. Then I would preſs the reſt of the Judges; and opening the red book, I would preſs every civil officer of government from 50l. a year ſalary, up to 50,000l. which would throw an immenſe ſum into our treaſury: and theſe

gentlemen

gentlemen could not complain, ſince they would receive twenty-five ſhillings a month, and their rations; and this without being obliged to fight. Laſtly, I think I would impreſs ***

ON THE CRIMINAL LAWS, AND THE PRACTICE OF PRIVATEERING.

Letter to Benjamin Vaughan, Esq.

My dear Friend, March 14th, 1785.

AMONG the pamphlets you lately ſent me, was one, entitled, *Thoughts on Executive Juſtice.* In return for that, I ſend you a French one on the ſame ſubject, *Obſervations concernant l'Exécution de l'Article II. de la Déclaration ſur le Vol.* They are both addreſſed to the judges, but written, as you will ſee, in a very different ſpirit. The Engliſh author is for hanging *all* thieves. The Frenchman is for proportioning puniſhments to offences.

If we really believe, as we profeſs to believe, that the law of Moſes was the law of God, the dictate of divine wiſdom,

dom, infinitely ſuperior to human; on what principles do we ordain death as the puniſhment of an offence, which, according to that law, was only to be puniſhed by a reſtitution of fourfold? To put a man to death for an offence which does not deſerve death, is it not a murder? And, as the French writer ſays, *Doit-on punir un délit contre la ſociété par un crime contre la nature?*

Superfluous property is the creature of ſociety. Simple and mild laws were ſufficient to guard the property that was merely neceſſary. The ſavage's bow, his hatchet, and his coat of ſkins, were ſufficiently ſecured, without law, by the fear of perſonal reſentment and retaliation. When, by virtue of the firſt laws, part of the ſociety accumulated wealth and grew powerful, they enacted others more ſevere, and would protect their property at the expence of humanity. This was abuſing their power, and com-

mencing a tyranny. If a ſavage, before he entered into ſociety, had been told—"Your neighbour, by this means, may "become owner of an hundred deer; "but if your brother, or your ſon, or "yourſelf, having no deer of your own, "and being hungry, ſhould kill one, an "infamous death muſt be the conſe-"quence:" he would probably have preferred his liberty, and his common right of killing any deer, to all the advantages of ſociety that might be propoſed to him.

That it is better a hundred guilty perſons ſhould eſcape, than that one innocent perſon ſhould ſuffer, is a maxim that has been long and generally approved; never, that I know of, controverted. Even the ſanguinary author of the *Thoughts* agrees to it, adding well, "that the very thought of *injured* inno-"cence, and much more that of *ſuffering* "innocence, muſt awaken all our ten-

" dereſt and moſt compaſſionate feelings, " and at the ſame time raiſe our higheſt " indignation againſt the inſtruments of " it. But," he adds, " there is no danger " of *either*, from a ſtrict adherence to " the laws."—Really!—Is it then impoſſible to make an unjuſt law? and if the law itſelf be unjuſt, may it not be the very " inſtrument" which ought " to " raiſe the author's, and every body's " higheſt indignation?" I ſee, in the laſt newſpapers from London, that a woman is capitally convicted at the Old Bailey for privately ſtealing out of a ſhop ſome gauze, value fourteen ſhillings and three-pence: Is there any proportion between the injury done by a theft, value fourteen ſhillings and three-pence, and the puniſhment of a human creature, by death, on a gibbet? Might not that woman, by her labour, have made the reparation ordained by God, in paying fourfold? Is not all puniſhment inflicted beyond the

merit of the offence, ſo much puniſhment of innocence? In this light, how vaſt is the annual quantity, of not only *injured* but *ſuffering* innocence, in almoſt all the civilized ſtates of Europe!

But it ſeems to have been thought, that this kind of innocence may be puniſhed by way of *preventing* crimes. I have read, indeed, of a cruel Turk in Barbary, who, whenever he bought a new Chriſtian ſlave, ordered him immediately to be hung up by the legs, and to receive a hundred blows of a cudgel on the ſoles of his feet, that the ſevere ſenſe of the puniſhment, and fear of incurring it thereafter, might prevent the faults that ſhould merit it. Our author himſelf would hardly approve entirely of this Turk's conduct in the government of ſlaves; and yet he appears to recommend ſomething like it for the government of Engliſh ſubjects, when he applauds the reply of Judge Burnet to the

the convict horſe-ſtealer; who being aſked what he had to ſay why judgment of death ſhould not paſs againſt him, and anſwering, that it was hard to hang a man for *only* ſtealing a horſe, was told by the judge, "Man, thou art not to be "hanged *only* for ſtealing a horſe, but "that horſes may not be ſtolen." The man's anſwer, if candidly examined, will, I imagine, appear reaſonable, as being founded on the eternal principle of juſtice and equity, that puniſhments ſhould be proportioned to offences; and the judge's reply brutal and unreaſonable; though the writer "wiſhes all "judges to carry it with them whenever "they go the circuit, and to bear it in "their minds, as containing a wiſe rea-"ſon for all the penal ſtatutes which "they are called upon to put in execu-"tion. It at once illuſtrates," ſays he, "the true grounds and reaſons of all ca-

"pital

"pital punishments whatsoever, namely, "that every man's property, as well as "his life, may be held sacred and invio-"late." Is there then no difference in value between property and life? If I think it right that the crime of murder should be punished with death, not only as an equal punishment of the crime, but to prevent other murders, does it follow that I must approve of inflicting the same punishment for a little invasion on my property by theft? If I am not myself so barbarous, so bloody-minded, and revengeful, as to kill a fellow-creature for stealing from me fourteen shillings and three-pence, how can I approve of a law that does it? Montesquieu, who was himself a judge, endeavours to impress other maxims. He must have known what humane judges feel on such occasions, and what the effects of those feelings; and, so far from thinking

thinking that ſevere and exceſſive puniſhments prevent crimes, he aſſerts, as quoted by our French writer, that

" *L'atrocité des loix en empêche l'exé-*
" *cution.*

" *Lorſque la peine eſt ſans meſure, on eſt*
" *ſouvent obligé de lui préférer l'impunité.*

" *La cauſe de tous les relâchemens vient*
" *de l'impunité des crimes, et non de la mo-*
" *dération des peines.*"

It is ſaid by thoſe who know Europe generally, that there are more theſts committed and puniſhed annually in England, than in all the other nations put together. If this be ſo, there muſt be a cauſe or cauſes for ſuch depravity in our common people. May not one be the deficiency of juſtice and morality in our national government, manifeſted in our oppreſſive conduct to ſubjects, and unjuſt wars on our neighbours? View the long perſiſted in, unjuſt, monopolizing treatment of Ireland, at length acknowledged!

ledged! View the plundering government exerciſed by our merchants in the Indies; the confiſcating war made upon the American colonies; and, to ſay nothing of thoſe upon France and Spain, view the late war upon Holland, which was ſeen by impartial Europe in no other light than that of a war of rapine and pillage; the hopes of an immenſe and eaſy prey being its only apparent, and probably its true and real motive and encouragement. Juſtice is as ſtrictly due between neighbour nations as between neighbour citizens. A highwayman is as much a robber when he plunders in a gang, as when ſingle; and a nation that makes an unjuſt war is only a great gang. After employing your people in robbing the Dutch, is it ſtrange that, being put out of that employ by peace, they ſtill continue robbing, and rob one another? *Piraterie*, as the French call it, or privateering, is the uni-

verſal

verſal bent of the Engliſh nation, at home and abroad, wherever ſettled. No leſs than ſeven hundred privateers were, it is ſaid, commiſſioned in the laſt war! Theſe were fitted out by merchants, to prey upon other merchants, who had never done them any injury. Is there probably any one of thoſe privateering merchants of London, who were ſo ready to rob the merchants of Amſterdam, that would not as readily plunder another London merchant of the next ſtreet, if he could do it with the ſame impunity? The avidity, the *alieni appetens* is the ſame; it is the fear alone of the gallows that makes the difference. How then can a nation, which, among the honeſteſt of its people, has ſo many thieves by inclination, and whoſe government encouraged and commiſſioned no leſs than ſeven hundred gangs of robbers; how can ſuch a nation have the face to condemn the crime in individuals, and

hang

hang up twenty of them in a morning? It naturally puts one in mind of a Newgate anecdote. One of the priſoners complained, that in the night ſomebody had taken his buckles out of his ſhoes. "What the devil!" ſays another, "have "we then *thieves* amongſt us? It muſt "not be ſuffered. Let us ſearch out the "rogue, and pump him to death."

There is, however, one late inſtance of an Engliſh merchant who will not profit by ſuch ill-gotten gain. He was, it ſeems, part-owner of a ſhip, which the other owners thought fit to employ as a letter of marque, and which took a number of French prizes. The booty being ſhared, he has now an agent here enquiring, by an advertiſement in the Gazette, for thoſe who ſuffered the loſs, in order to make them, as far as in him lies, reſtitution. This conſcientious man is a quaker. The Scotch preſbyterians were formerly as tender: for there

there is ſtill extant an ordinance of the town-council of Edinburgh, made ſoon after the Reformation, "forbidding the "purchaſe of prize goods, under pain "of loſing the freedom of the burgh for "ever, with other puniſhment at the "will of the magiſtrate; the practice of "making prizes being contrary to good "conſcience, and the rule of treating "Chriſtian brethren as we would wiſh to "be treated; and ſuch goods *are not to* "*be ſold by any godly men within this* "*burgh.*" The race of theſe godly men in Scotland is probably extinct, or their principles abandoned, ſince, as far as that nation had a hand in promoting the war againſt the colonies, prizes and confiſcations are believed to have been a conſiderable motive.

It has been for ſome time a generally-received opinion, that a military man is not to enquire whether a war be juſt or unjuſt; he is to execute his orders. All

princes

princes who are diſpoſed to become tyrants, muſt probably approve of this opinion, and be willing to eſtabliſh it; but is it not a dangerous one? ſince, on that principle, if the tyrant commands his army to attack and deſtroy, not only an unoffending neighbour nation, but even his own ſubjects, the army is bound to obey. A negro ſlave, in our colonies, being commanded by his maſter to rob or murder a neighbour, or do any other immoral act, may refuſe; and the magiſtrate will protect him in his refuſal. The ſlavery then of a ſoldier is worſe than that of a negro! A conſcientious officer, if not reſtrained by the apprehenſion of its being imputed to another cauſe, may indeed reſign, rather than be employed in an unjuſt war; but the private men are ſlaves for life; and they are perhaps incapable of judging for themſelves. We can only lament their fate, and ſtill more that of a ſailor, who is often dragged by force

force from his honeſt occupation, and compelled to imbrue his hands in perhaps innocent blood. But methinks it well behoves merchants (men more enlightened by their education, and perfectly free from any ſuch force or obligation) to conſider well of the juſtice of a war, before they voluntarily engage a gang of ruffians to attack their fellow-merchants of a neighbouring nation, to plunder them of their property, and perhaps ruin them and their families, if they yield it; or to wound, maim, and murder them, if they endeavour to defend it. Yet theſe things are done by Chriſtian merchants, whether a war be juſt or unjuſt; and it can hardly be juſt on both ſides. They are done by Engliſh and American merchants, who, nevertheleſs, complain of private theft, and hang by dozens the thieves they have taught by their own example.

It is high time, for the ſake of huma-

nity, that a ſtop were put to this enormity. The United States of America, though better ſituated than any European nation to make profit by privateering (moſt of the trade of Europe with the Weſt Indies paſſing before their doors), are, as far as in them lies, endeavouring to aboliſh the practice, by offering, in all their treaties with other powers, an article, engaging ſolemnly, that, in caſe of future war, no privateer ſhall be commiſſioned on either ſide; and that unarmed merchant-ſhips, on both ſides, ſhall purſue their voyages unmoleſted*. This will be a happy improvement

* This offer having been accepted by the late king of Pruſſia, a treaty of amity and commerce was concluded between that monarch and the United States, containing the following humane, philanthropic article; in the formation of which Dr. Franklin, as one of the American plenipotentiaries, was principally concerned, viz.

ART. XXIII.

If war ſhould ariſe between the two contracting parties,

provement of the law of nations. The parties, the merchants of either country, then reſiding in the other, ſhall be allowed to remain nine months to collect their debts and ſettle their affairs, and may depart freely, carrying off all their effects without moleſtation or hindrance: and all women and children, ſcholars of every faculty, cultivators of the earth, artiſans, manufacturers, and fiſhermen, unarmed and inhabiting unfortified towns, villages, or places, and in general all others whoſe occupations are for the common ſubſiſtence and benefit of mankind, ſhall be allowed to continue their reſpective employments, and ſhall not be moleſted in their perſons, nor ſhall their houſes or goods be burnt, or otherwiſe deſtroyed, nor their fields waſted, by the armed force of the enemy, into whoſe power, by the events of war, they may happen to fall; but if any thing is neceſſary to be taken from them for the uſe of ſuch armed force, the ſame ſhall be paid for at a reaſonable price. And all merchant and trading veſſels employed in exchanging the products of different places, and thereby rendering the neceſſaries, conveniences, and comforts of human life more eaſy to be obtained, and more general, ſhall be allowed to paſs free and unmoleſted; and neither of the contracting powers ſhall grant or iſſue any commiſſion to any private armed veſſels, empowering them to take or deſtroy ſuch trading veſſels, or interrupt ſuch commerce.

humane and the juſt cannot but wiſh general ſucceſs to the propoſition.

With unchangeable eſteem and affection,

I am, my dear friend,

Ever yours.

REMARKS

REMARKS CONCERNING THE SAVAGES OF NORTH-AMERICA.

SAVAGES we call them, becauſe their manners differ from ours, which we think the perfection of civility; they think the ſame of theirs.

Perhaps, if we could examine the manners of different nations with impartiality, we ſhould find no people ſo rude as to be without any rules of politeneſs; nor any ſo polite as not to have ſome remains of rudeneſs.

The Indian men, when young, are hunters and warriors; when old, counſellors; for all their government is by the counſel or advice of the ſages; there is no force, there are no priſons, no officers to compel obedience, or inflict puniſhment. Hence they generally ſtudy

oratory; the beſt ſpeaker having the moſt influence. The Indian women till the ground, dreſs the food, nurſe and bring up the children, and preſerve and hand down to poſterity the memory of public tranſactions. Theſe employments of men and women are accounted natural and honourable. Having few artificial wants, they have abundance of leiſure for improvement by converſation. Our laborious manner of life, compared with theirs, they eſteem ſlaviſh and baſe; and the learning on which we value ourſelves they regard as frivolous and uſeleſs. An inſtance of this occurred at the treaty of Lancaſter, in Pennſylvania, anno 1744, between the government of Virginia and the Six Nations. After the principal buſineſs was ſettled, the commiſſioners from Virginia acquainted the Indians by a ſpeech, that there was at Williamſburg a college, with a fund, for educating Indian youth; and that if the chiefs of the

Six

Six Nations would ſend down half a dozen of their ſons to that college, the government would take care that they ſhould be well provided for, and inſtructed in all the learning of the white people. It is one of the Indian rules of politeneſs not to anſwer a public propoſition the ſame day that it is made; they think it would be treating it as a light matter; and that they ſhew it reſpect by taking time to conſider it, as of a matter important. They therefore deferred their anſwer till the day following; when their ſpeaker began, by expreſſing their deep ſenſe of the kindneſs of the Virginia government, in making them that offer; "for we know," ſays he, "that "you highly eſteem the kind of learn- "ing taught in thoſe colleges, and that "the maintenance of our young men, "while with you, would be very expen- "ſive to you. We are convinced, there- "fore, that you mean to do us good by

" your propoſal; and we thank you
" heartily. But you who are wiſe muſt
" know, that different nations have dif-
" ferent conceptions of things; and you
" will therefore not take it amiſs, if our
" ideas of this kind of education happen
" not to be the ſame with yours. We
" have had ſome experience of it: ſeve-
" ral of our young people were formerly
" brought up at the colleges of the
" northern provinces; they were in-
" ſtructed in all your ſciences; but
" when they came back, to us they were
" bad runners; ignorant of every means
" of living in the woods; unable to
" bear either cold or hunger; knew
" neither how to build a cabin, take a
" deer, or kill an enemy; ſpoke our
" language imperfectly; were therefore
" neither fit for hunters, warriors, or
" counſellors; they were totally good
" for nothing. We are however not the
" leſs obliged by your kind offer, though

" we

"we decline accepting it: and to ſhew "our grateful ſenſe of it, if the gentle- "men of Virginia will ſend us a dozen "of their ſons, we will take great care of "their education, inſtruct them in all "we know, and make *men* of them."

Having frequent occaſions to hold public councils, they have acquired great order and decency in conducting them. The old men ſit in the foremoſt ranks, the warriors in the next, and the women and children in the hindmoſt. The buſineſs of the women is to take exact notice of what paſſes, imprint it in their memories, for they have no writing, and communicate it to their children. They are the records of the council, and they preſerve tradition of the ſtipulations in treaties a hundred years back; which when we compare with our writings we always find exact. He that would ſpeak, riſes. The reſt obſerve a profound ſilence. When he has finiſhed, and ſits down,

down, they leave him five or ſix minutes to recollect, that, if he has omitted any thing he intended to ſay, or has any thing to add, he may riſe again and deliver it. To interrupt another, even in common converſation, is reckoned highly indecent. How different this is from the conduct of a polite Britiſh Houſe of Commons, where ſcarce a day paſſes without ſome confuſion, that makes the Speaker hoarſe in calling *to order*; and how different from the mode of converſation in many polite companies of Europe, where, if you do not deliver your ſentence with great rapidity, you are cut off in the middle of it by the impatient loquacity of thoſe you converſe with, and never ſuffered to finiſh it!

The politeneſs of theſe ſavages in converſation is, indeed, carried to exceſs; ſince it does not permit them to contradict or deny the truth of what is aſſerted in their preſence. By this means they indeed

indeed avoid diſputes; but then it becomes difficult to know their minds, or what impreſſion you make upon them. The miſſionaries who have attempted to convert them to Chriſtianity, all complain of this as one of the great difficulties of their miſſion. The Indians hear with patience the truths of the goſpel explained to them, and give their uſual tokens of aſſent and approbation: you would think they were convinced. No ſuch matter. It is mere civility.

A Swediſh miniſter having aſſembled the chiefs of the Saſquehannah Indians, made a ſermon to them, acquainting them with the principal hiſtorical facts on which our religion is founded; ſuch as the fall of our firſt parents by eating an apple; the coming of Chriſt to repair the miſchief; his miracles and ſuffering, &c.——When he had finiſhed, an Indian orator ſtood up to thank him. "What you have told us," ſays he, "is

"all

"all very good. It is indeed bad to "eat apples. It is better to make "them all into cyder. We are much "obliged by your kindneſs in coming "ſo far, to tell us thoſe things which "you have heard from your mothers. "In return, I will tell you ſome of thoſe "we have heard from ours.

"In the beginning, our fathers had "only the fleſh of animals to ſubſiſt on; "and if their hunting was unſucceſsful, "they were ſtarving. Two of our young "hunters, having killed a deer, made a "fire in the woods to broil ſome parts of "it. When they were about to ſatisfy "their hunger, they beheld a beautiful "young woman deſcend from the clouds, "and ſeat herſelf on that hill which you "ſee yonder among the Blue Mountains. "They ſaid to each other, It is a ſpirit "that perhaps has ſmelt our broiling "veniſon, and wiſhes to eat of it: let "us offer ſome to her. They preſented

"her

" her with the tongue: ſhe was pleaſed " with the taſte of it, and ſaid, Your " kindneſs ſhall be rewarded. Come " to this place after thirteen moons, and " you ſhall find ſomething that will " be of great benefit in nouriſhing you " and your children to the lateſt gene- " rations. They did ſo, and, to their " ſurpriſe, found plants they had never " ſeen before; but which, from that " ancient time, have been conſtantly " cultivated among us, to our great " advantage. Where her right hand " had touched the ground, they found " maize; where her left hand had " touched it they found kidney-beans; " and where her backſide had ſat on it, " they found tobacco." The good miſſionary, diſguſted with this idle tale, ſaid, " What I delivered to you were ſa- " cred truths; but what you tell me is " mere fable, fiction, and falſehood." The Indian, offended, replied, " My " brother,

" brother, it ſeems your friends have not
" done you juſtice in your education;
" they have not well inſtructed you in
" the rules of common civility. You ſaw
" that we, who underſtand and practiſe
" thoſe rules, believed all your ſtories,
" why do you refuſe to believe ours?"

When any of them come into our towns, our people are apt to crowd round them, gaze upon them, and incommode them where they deſire to be private; this they eſteem great rudeneſs, and the effect of the want of inſtruction in the rules of civility and good manners. " We have," ſay they, " as much
" curioſity as you, and when you come
" into our towns, we wiſh for opportu-
" nities of looking at you; but for this
" purpoſe we hide ourſelves behind
" buſhes where you are to paſs, and
" never intrude ourſelves into your com-
" pany."

Their manner of entering one another's

villages has likewiſe its rules. It is reckoned uncivil in travelling ſtrangers to enter a village abruptly, without giving notice of their approach. Therefore, as ſoon as they arrive within hearing, they ſtop and holla, remaining there till invited to enter. Two old men uſually come out to them, and lead them in. There is in every village a vacant dwelling, called the ſtrangers' houſe. Here they are placed, while the old men go round from hut to hut, acquainting the inhabitants that ſtrangers are arrived, who are probably hungry and weary; and every one ſends them what he can ſpare of victuals, and ſkins to repoſe on. When the ſtrangers are refreſhed, pipes and tobacco are brought; and then, but not before, converſation begins, with enquiries who they are, whither bound, what news, &c. and it uſually ends with offers of ſervice; if the ſtrangers have occaſion for guides, or any neceſſa-

ries

ries for continuing their journey; and nothing is exacted for the entertainment.

The ſame hoſpitality, eſteemed among them as a principal virtue, is practiſed by private perſons; of which *Conrad Weiſer*, our interpreter, gave me the following inſtance. He had been naturalized among the Six Nations, and ſpoke well the Mohuck language. In going through the Indian country, to carry a meſſage from our governor to the council at *Onondaga*, he called at the habitation of *Canaſſetego*, an old acquaintance, who embraced him, ſpread furs for him to ſit on, placed before him ſome boiled beans and veniſon, and mixed ſome rum and water for his drink. When he was well refreſhed, and had lit his pipe, Canaſſetego began to converſe with him; aſked how he had fared the many years ſince they had ſeen each other, whence he then came, what occaſioned the journey, &c. Conrad anſwered

ſwered all his queſtions; and when the diſcourſe began to flag, the Indian, to continue it, ſaid, "Conrad, you have lived "long among the white people, and "know ſomething of their cuſtoms; "I have been ſometimes at Albany, and "have obſerved, that once in ſeven days "they ſhut up their ſhops, and aſſemble "all in the great houſe; tell me what "it is for? What do they do there?" "They meet there," ſays Conrad, "to "hear and learn *good things*." "I do "not doubt," ſays the Indian, "that "they tell you ſo; they have told me "the ſame: but I doubt the truth of "what they ſay, and I will tell you "my reaſons. I went lately to Albany "to ſell my ſkins and buy blankets, "knives, powder, rum, &c. You know "I uſed generally to deal with Hans "Hanſon, but I was a little inclined "this time to try ſome other merchants. "However, I called firſt upon Hans,

" and aſked him what he would give for
" beaver. He ſaid he could not give
" more than four ſhillings a pound:
" but, ſays he, I cannot talk on buſineſs
" now; this is the day when we meet
" together to learn *good things*, and I am
" going to the meeting. So I thought to
" myſelf, ſince I cannot do any buſineſs
" to-day, I may as well go to the meeting
" too, and I went with him. There ſtood
" up a man in black, and began to talk
" to the people very angrily. I did not
" underſtand what he ſaid; but perceiv-
" ing that he looked much at me, and
" at Hanſon, I imagined he was angry
" at ſeeing me there; ſo I went out,
" ſat down near the houſe, ſtruck fire,
" and lit my pipe, waiting till the meet-
" ing ſhould break up. I thought too
" that the man had mentioned ſomething
" of beaver, and I ſuſpected it might be
" the ſubject of their meeting. So when
" they came out I accoſted my merchant.
" Well,

"Well, Hans, ſays I, I hope you have "agreed to give more than four ſhillings "a pound." "No," ſays he, "I cannot "give ſo much, I cannot give more than "three ſhillings and ſixpence." "I then "ſpoke to ſeveral other dealers, but they "all ſung the ſame ſong, three and ſix-"pence, three and ſixpence. This made "it clear to me that my ſuſpicion was "right; and that, whatever they pre-"tended of meeting to learn *good things*, "the real purpoſe was to conſult how "to cheat Indians in the price of beaver. "Conſider but a little, Conrad, and "you muſt be of my opinion. If they "met ſo often to learn *good things*, they "would certainly have learned ſome be-"fore this time. But they are ſtill igno-"rant. You know our practice. If a white "man, in travelling through our coun-"try, enters one of our cabins, we all "treat him as I do you; we dry him if "he is wet, we warm him if he is cold,

" and give him meat and drink, that he " may allay his thirſt and hunger; and " we ſpread ſoft furs for him to reſt and " ſleep on: we demand nothing in re- " turn*. But if I go into a white man's " houſe at Albany, and aſk for victuals " and drink, they ſay, Where is your " money? and if I have none, they ſay, " Get out, you Indian dog. You ſee " they have not yet learned thoſe little " *good things* that we need no meetings

* It is remarkable that, in all ages and countries, hoſpitality has been allowed as the virtue of thoſe whom the civilized were pleaſed to call Barbarians. The Greeks celebrated the Scythians for it. The Saracens poſſeſſed it eminently; and it is to this day the reigning virtue of the wild Arabs. St. Paul too, in the relation of his voyage and ſhipwreck on the iſland of Melita, ſays, " The barbarous people " ſhewed us no little kindneſs; for they kindled " a fire, and received us every one, becauſe of the " preſent rain, and becauſe of the cold." This note is taken from a ſmall collection of Franklin's papers, printed for Dilly.

" to

" to be inſtructed in, becauſe our mo-
" thers taught them to us when we were
" children; and therefore it is impoſſible
" their meetings ſhould be, as they ſay,
" for any ſuch purpoſe, or have any
" ſuch effect; they are only to contrive
" *the cheating of Indians in the price of*
" *beaver.*"

TO MR. DUBOURG, CONCERNING THE DISSENSIONS BETWEEN ENGLAND AND AMERICA.

London, October 2, 1770.

I SEE with pleaſure that we think pretty much alike on the ſubjects of Engliſh America. We of the colonies have never inſiſted that we ought to be exempt from contributing to the common expences neceſſary to ſupport the proſperity of the empire. We only aſſert, that having parliaments of our own, and not having repreſentatives in that of Great Britain, our parliaments are the only judges of what we can and what we ought to contribute in this caſe; and that the Engliſh parliament has no right to take our money without our conſent.

In

In fact, the Britiſh empire is not a ſingle ſtate; it comprehends many; and though the parliament of Great Britain has arrogated to itſelf the power of taxing the colonies, it has no more right to do ſo, than it has to tax Hanover. We have the ſame king, but not the ſame legiſlatures.

The diſpute between the two countries has already loſt England many millions ſterling, which it has loſt in its commerce; and America has in this reſpect been a proportionable gainer. This commerce conſiſted principally of ſuperfluities; objects of luxury and faſhion, which we can well do without; and the reſolution we have formed of importing no more till our grievances are redreſſed, has enabled many of our infant manufactures to take root; and it will not be eaſy to make our people abandon them in future, even ſhould a connection more cordial than ever ſucceed the pre-

ſent troubles.—I have, indeed, no doubt that the parliament of England will finally abandon its preſent pretenſions, and leave us to the peaceable enjoyment of our rights and privileges.

B. FRANKLIN.

PREFERENCE OF BOWS AND ARROWS IN WAR TO FIRE ARMS.

To Major General Lee.

Philadelphia, Feb. 11, 1776.

DEAR SIR,

THE bearer, Monſ. Arundel, is directed by the congreſs to repair to general Schuyler, in order to be employed by him in the artillery ſervice. He propoſes to wait on you in his way, and has requeſted me to introduce him by a line to you. He has been an officer in the French ſervice, as you will ſee by his commiſſions; and profeſſing a good will to our cauſe, I hope he may be uſeful in inſtructing our gunners and matroſſes: perhaps he may adviſe in opening the nailed cannon.

I received the incloſed the other day from

from an officer, Mr. Newland, who ſerved in the two laſt wars and was known by general Gates, who ſpoke well of him to me when I was at Cambridge. He is deſirous now of entering into your ſervice. I have adviſed him to wait upon you at New York.

They ſtill talk big in England, and threaten hard; but their language is ſomewhat civiller, at leaſt not quite ſo diſreſpectful to us. By degrees they come to their ſenſes, but too late, I fancy, for their intereſt.

We have got a large quantity of ſaltpetre, one hundred and twenty ton, and thirty more expected. Powder mills are now wanting; I believe we muſt ſet to work and make it by hand. But I ſtill wiſh with you, that pikes could be introduced, and I would add bows and arrows: theſe were good weapons, and not wiſely laid aſide.

1. Becauſe a man may ſhoot as truly

truly with a bow as with a common muſket.

2. He can diſcharge four arrows in the time of charging and diſcharging one bullet.

3. His object is not taken from his view by the ſmoke of his own ſide.

4. A flight of arrows ſeen coming upon them terrifies and diſturbs the enemy's attention to his buſineſs.

5. An arrow ſticking in any part of a man, puts him *hors du combat* till it is extracted.

6. Bows and arrows are more eaſily provided every where than muſkets and ammunition.

Polydore Virgil, ſpeaking of one of our battles againſt the French in Edward the third's reign, mentions the great confuſion the enemy was thrown into, *ſagittarum nube*, from the Engliſh; and concludes, *Eſt res profecto dictu mirabilis, ut tantus ac potens exercitus a ſolis ferè Anglicis*

cis ſagittariis victus fuerit; adeo Anglus eſt ſagittipotens, et id genus armorum valet. If ſo much execution was done by arrows when men wore ſome defenſive armour, how much more might be done now that it is out of uſe!

I am glad you are come to New-York, but I alſo wiſh you could be in Canada. There is a kind of ſuſpenſe in men's minds here at preſent, waiting to ſee what terms will be offered from England. I expect none that we can accept; and when that is generally ſeen, we ſhall be more unanimous and more deciſive: then your propoſed ſolemn league and covenant will go better down; and perhaps moſt of our other ſtrong meaſures adopted.

I am always glad to hear from you, but I do not deſerve your favours, being ſo bad a correſpondent. My eyes will now hardly ſerve me to write by night, and theſe ſhort days have been all taken

up

up by ſuch variety of buſineſs that I ſeldom can ſit down ten minutes without interruption—God give you ſucceſs!

I am, with the greateſt eſteem,

Yours affectionately,

B. FRANKLIN.

A Com-

A Comparison of the Conduct of the Ancient JEWS *and of the* ANTIFEDERALISTS *in the United States of* AMERICA.

A ZEALOUS advocate for the proposed Federal Constitution in a certain public assembly said, that "the repugnance of "a great part of mankind to good go- "vernment was such, that he believed, "that if an angel from heaven was to "bring down a constitution formed there "for our use, it would nevertheless meet "with violent opposition." —He was reproved for the supposed extravagance of the sentiment; and he did not justify it. —Probably it might not have immediately occurred to him that the experiment had been tried, and that the event was recorded in the most faithful of all histories,

tories, the Holy Bible; otherwiſe he might, as it ſeems to me, have ſupported his opinion by that unexceptionable authority.

The Supreme Being had been pleaſed to nouriſh up a ſingle family, by continued acts of his attentive providence, till it became a great people; and having reſcued them from bondage by many miracles performed by his ſervant Moſes, he perſonally delivered to that choſen ſervant, in preſence of the whole nation, a conſtitution and code of laws for their obſervance; accompanied and ſanctioned with promiſes of great rewards, and threats of ſevere puniſhments, as the conſequence of their obedience or diſobedience.

This conſtitution, though the Deity himſelf was to be at its head (and it is therefore called by political writers a Theocracy), could not be carried into execution but by the means of his miniſters.

Aaron and his ſons were therefore commiſſioned to be, with Moſes, the firſt eſtabliſhed miniſtry of the new government.

One would have thought, that the appointment of men who had diſtinguiſhed themſelves in procuring the liberty of their nation, and had hazarded their lives in openly oppoſing the will of a powerful monarch who would have retained that nation in ſlavery, might have been an appointment acceptable to a grateful people; and that a conſtitution, framed for them by the Deity himſelf, might on that account have been ſecure of an univerſal welcome reception. Yet there were, in every one of the thirteen tribes, ſome diſcontented, reſtleſs ſpirits, who were continually exciting them to reject the propoſed new government, and this from various motives.

Many ſtill retained an affection for Egypt, the land of their nativity; and

theſe,

theſe, whenever they felt any inconvenience or hardſhip, though the natural and unavoidable effect of their change of ſituation, exclaimed againſt their leaders as the authors of their trouble; and were not only for returning into Egypt, but for ſtoning their deliverers *.—Thoſe inclined to idolatry were diſpleaſed that their golden calf was deſtroyed. Many of the chiefs thought the new conſtitution might be injurious to their particular intereſts, that the profitable places would be *engroſſed by the families and friends of Moſes and Aaron*, and others equally well born excluded †.—In Joſephus, and the Talmud, we learn

* Numbers, chap. xiv.

† Numbers, chap. xvi. ver. 3. "And they gathered themſelves together againſt Moſes and "againſt Aaron, and ſaid unto them, Ye take too "much upon you, ſeeing all the congregations are "holy, every one of them,—wherefore then lift ye "up yourſelves above the congregation?"

ſome particulars, not ſo fully narrated in the ſcripture. We are there told, "that Corah was ambitious of the prieſt-"hood; and offended that it was confer-"red on Aaron; and this, as he ſaid, by "the authority of Moſes only, *without the* "*conſent of the people.* He accuſed Moſes "of having, by various artifices, frau-"dulently obtained the government, "and deprived the people of their liber-"ties; and of conſpiring with Aaron to "perpetuate the tyranny in their family. "Thus, though Corah's real motive was "the ſupplanting of Aaron, he perſuaded "the people that he meant only the pub-"lic good; and they, moved by his in-"ſinuations, began to cry out,—'Let "us maintain the common liberty of our "*reſpective tribes*; we have freed our-"ſelves from the ſlavery impoſed upon "us by the Egyptians, and ſhall we ſuf-"fer ourſelves to be made ſlaves by "Moſes? If we muſt have a maſter, it

"were

" were better to return to Pharaoh,
" who at leaſt fed us with bread and
" onions, than to ſerve this new tyrant,
" who by his operations has brought us
" into danger of famine.' Then they
" called in queſtion the *reality of his*
" *conference* with God; and objected to
" the privacy of the meetings, and the
" preventing any of the people from being
" preſent at the colloquies, or even ap-
" proaching the place, as grounds of great
" ſuſpicion. They accuſed Moſes alſo of
" *peculation*; as embezzling part of the gol-
" den ſpoons and the ſilver chargers, that
" the princes had offered at the dedication
" of the altar *, and the offerings of gold
" by the common people †, as well as
" moſt of the poll tax ‡; and Aaron
" they accuſed of pocketing much of the

* Numbers, chap. vii.

† Exodus, chapter xxxv. ver. 22.

‡ Numbers, chap. iii. and Exodus, chap. xxx.

" gold of which he pretended to have
" made a molten calf. Beſides pecula-
" tion, they charged Moſes with *ambition*;
" to gratify which paſſion, he had, they
" ſaid, deceived the people, by promiſ-
" ing to bring them to a land flowing
" with milk and honey; inſtead of doing
" which, he had brought them *from* ſuch
" a land; and that he thought light of all
" this miſchief, provided he could make
" himſelf an *abſolute prince* *. That, to
" ſupport the new dignity with ſplendour
" in his family, the partial poll tax alrea-
" dy levied and given to Aaron † was to
" be followed by a general one ‡ which
" would probably be augmented from

* Numbers, chap. xvi. ver. 13. " Is it a ſmall
" thing that thou haſt brought us up out of a land
" flowing with milk and honey, to kill us in this
" wilderneſs, except thou make thyſelf altogether a
" prince over us?"

† Numbers, chap. iii.

‡ Exodus, chap. xxx.

" time

" time to time, if he were ſuffered to go " on promulgating new laws, on pretence " of new occaſional revelations of the di- " vine will, till their whole fortunes were " devoured by that ariſtocracy."

Moſes denied the charge of peculation; and his accuſers were deſtitute of proofs to ſupport it; though *facts*, if real, are in their nature capable of proof. " I " have not," ſaid he (with holy confidence in the preſence of God), " I have not " taken from this people the value of an " aſs, nor done them any other injury." But his enemies had made the charge, and with ſome ſucceſs among the populace; for no kind of accuſation is ſo readily made, or eaſily believed, by knaves, as the accuſation of knavery.

In fine, no leſs than two hundred and fifty of the principal men " famous in " the congregation, men of renown *,"

* Numbers, chap. xvi.

heading and exciting the mob, worked them up to ſuch a pitch of phrenſy, that they called out, Stone 'em, ſtone 'em, and thereby ſecure our liberties; and let us chooſe other captains that may lead us back into Egypt, in caſe we do not ſucceed in reducing the Canaanites.

On the whole, it appears that the Iſraelites were a people jealous of their newly acquired liberty, which jealouſy was in itſelf no fault; but that, when they ſuffered it to be worked upon by artful men, pretending public good, with nothing really in view but private intereſt, they were led to oppoſe the eſtabliſhment of the new conſtitution, whereby they brought upon themſelves much inconvenience and misfortune. It farther appears from the ſame ineſtimable hiſtory, that when, after many ages, the conſtitution had become old and much abuſed, and an amendment of it was propoſed, the populace, as they had

accuſed

accuſed Moſes of the ambition of making himſelf a prince, and cried out, Stone him, ſtone him; ſo, excited by their high-prieſts and ſcribes, they exclaimed againſt the Meſſiah, that he aimed at becoming king of the Jews, and cried, Crucify him, crucify him. From all which we may gather, that popular oppoſition to a public meaſure is no proof of its impropriety, even though the oppoſition be excited and headed by men of diſtinction.

To conclude, I beg I may not be underſtood to infer, that our general convention was divinely inſpired when it formed the new federal conſtitution, merely becauſe that conſtitution has been unreaſonably and vehemently oppoſed: yet, I muſt own, I have ſo much faith in the general government of the world by Providence, that I can hardly conceive a tranſaction of ſuch momentous importance to the welfare of mil-

lions now exiſting, and to exiſt in the poſterity of a great nation, ſhould be ſuffered to paſs without being in ſome degree influenced, guided, and governed by that omnipotent, omnipreſent and beneficent Ruler, in whom all inferior ſpirits live, and move, and have their being.

THE

THE INTERNAL STATE OF AMERICA:

Being a true Deſcription of the Intereſt and Policy of that vaſt Continent.

THERE is a tradition, that, in the planting of New-England, the firſt ſettlers met with many difficulties and hardſhips; as is generally the caſe when a civilized people attempt eſtabliſhing themſelves in a wilderneſs country. Being piouſly diſpoſed, they ſought relief from Heaven, by laying their wants and diſtreſſes before the Lord, in frequent ſet days of faſting and prayer. Conſtant meditation and diſcourſe on theſe ſubjects kept their minds gloomy and diſcontented; and, like the children of Iſrael, there were many diſpoſed to return to that Egypt which perſecution had induced them to abandon. At length, when

when it was propoſed in the aſſembly to proclaim another faſt, a farmer of plain ſenſe roſe, and remarked, that the inconveniences they ſuffered, and concerning which they had ſo often wearied Heaven with their complaints, were not ſo great as they might have expected, and were diminiſhing every day as the colony ſtrengthened; that the earth began to reward their labour, and to furniſh liberally for their ſubſiſtence; that the ſeas and rivers were found full of fiſh, the air ſweet, the climate healthy; and, above all, that they were there in the full enjoyment of liberty, civil and religious: he therefore thought that reflecting and converſing on theſe ſubjects would be more comfortable, as tending more to make them contented with their ſituation; and that it would be more becoming the gratitude they owed to the Divine Being, if, inſtead of a faſt, they ſhould proclaim a thankſgiving. His

advice

advice was taken; and from that day to this they have, in every year, obſerved circumſtances of public felicity ſufficient to furniſh employment for a thankſgiving day; which is therefore conſtantly ordered, and religiouſly obſerved.

I ſee in the public newſpapers of different ſtates frequent complaints of *hard times*, *deadneſs of trade*, *ſcarcity of money*, &c. &c. It is not my intention to aſſert or maintain that theſe complaints are entirely without foundation. There can be no country or nation exiſting, in which there will not be ſome people ſo circumſtanced as to find it hard to gain a livelihood; people who are not in the way of any profitable trade, and with whom money is ſcarce, becauſe they have nothing to give in exchange for it; and it is always in the power of a ſmall number to make a great clamour. But let us take a cool view of the general ſtate of our affairs, and perhaps the proſpect will

will appear leſs gloomy than has been imagined.

The great buſineſs of the continent is agriculture. For one artiſan, or merchant, I ſuppoſe, we have at leaſt one hundred farmers, by far the greateſt part cultivators of their own fertile lands, from whence many of them draw not only food neceſſary for their ſubſiſtence, but the materials of their clothing, ſo as to need very few foreign ſupplies; while they have a ſurplus of productions to diſpoſe of, whereby wealth is gradually accumulated. Such has been the goodneſs of Divine Providence to theſe regions, and ſo favourable the climate, that, ſince the three or four years of hardſhip in the firſt ſettlement of our fathers here, a famine or ſcarcity has never been heard of amongſt us; on the contrary, though ſome years may have been more, and others leſs plentiful, there has always been proviſion enough for ourſelves, and

a quan-

a quantity to ſpare for exportation. And although the crops of laſt year were generally good, never was the farmer better paid for the part he can ſpare commerce, as the publiſhed price currents abundantly teſtify. The lands he poſſeſſes are alſo continually riſing in value with the increaſe of population; and, on the whole, he is enabled to give ſuch good wages to thoſe who work for him, that all who are acquainted with the old world muſt agree, that in no part of it are the labouring poor ſo generally well fed, well clothed, well lodged, and well paid, as in the United States of America.

If we enter the cities, we find that, ſince the revolution, the owners of houſes and lots of ground have had their intereſt vaſtly augmented in value; rents have riſen to an aſtoniſhing height, and thence encouragement to increaſe building, which gives employment to an abundance

dance of workmen, as does alſo the increaſed luxury and ſplendour of living of the inhabitants thus made richer. Theſe workmen all demand and obtain much higher wages than any other part of the world would afford them, and are paid in ready money. This rank of people therefore do not, or ought not, to complain of hard times; and they make a very conſiderable part of the city inhabitants.

At the diſtance I live from our American fiſheries, I cannot ſpeak of them with any degree of certainty; but I have not heard that the labour of the valuable race of men employed in them is worſe paid, or that they meet with leſs ſucceſs, than before the revolution. The whale-men indeed have been deprived of one market for their oil; but another, I hear, is opening for them, which it is hoped may be equally advantageous; and the demand is conſtantly increaſing for

for their ſpermaceti candles, which therefore bear a much higher price than formerly.

There remain the merchants and ſhopkeepers. Of theſe, though they make but a ſmall part of the whole nation, the number is conſiderable, too great indeed for the buſineſs they are employed in; for the conſumption of goods in every country has its limits; the faculties of the people, that is, their ability to buy and pay, are equal only to a certain quantity of merchandize. If merchants calculate amiſs on this proportion, and import too much, they will of courſe find the ſale dull for the overplus, and ſome of them will ſay that trade languiſhes. They ſhould, and doubtleſs will, grow wiſer by experience, and import leſs. If too many artificers in town, and farmers from the country, flattering themſelves with the idea of leading eaſier lives, turn ſhopkeepers, the whole natural quantity

of

of that buſineſs divided among them all may afford too ſmall a ſhare for each, and occaſion complaints that trading is dead; theſe may alſo ſuppoſe that it is owing to ſcarcity of money, while, in fact, it is not ſo much from the fewneſs of buyers, as from the exceſſive number of ſellers, that the miſchief ariſes; and, if every ſhopkeeping farmer and mechanic would return to the uſe of his plough and working tools, there would remain of widows, and other women, ſhopkeepers ſufficient for the buſineſs, which might then afford them a comfortable maintenance.

Whoever has travelled through the various parts of Europe, and obſerved how ſmall is the proportion of people in affluence or eaſy circumſtances there, compared with thoſe in poverty and miſery; the few rich and haughty landlords, the multitude of poor, abject, rack-rented, tythe-paying tenants, and half-

paid

paid and half-ſtarved ragged labourers; and views here the happy mediocrity that ſo generally prevails throughout theſe ſtates, where the cultivator works for himſelf, and ſupports his family in decent plenty; will, methinks, ſee abundant reaſon to bleſs Divine Providence for the evident and great difference in our favour, and be convinced that no nation known to us enjoys a greater ſhare of human felicity.

It is true, that in ſome of the ſtates there are parties and diſcords; but let us look back, and aſk if we were ever without them? Such will exiſt wherever there is liberty; and perhaps they help to preſerve it. By the colliſion of different ſentiments, ſparks of truth are ſtruck out, and political light is obtained. The different factions which at preſent divide us aim all at the public good; the differences are only about the various modes of promoting it. Things, actions,

meaſures, and objects of all kinds, preſent themſelves to the minds of men in ſuch a variety of lights, that it is not poſſible we ſhould all think alike at the ſame time on every ſubject, when hardly the ſame man retains at all times the ſame ideas of it. Parties are therefore the common lot of humanity; and ours are by no means more miſchievous or leſs beneficial than thoſe of other countries, nations, and ages, enjoying in the ſame degree the great bleſſing of political liberty.

Some indeed among us are not ſo much grieved for the preſent ſtate of our affairs, as apprehenſive for the future. The growth of luxury alarms them, and they think we are from that alone in the high road to ruin. They obſerve, that no revenue is ſufficient without œconomy, and that the moſt plentiful income of a whole people from the natural productions of their country may be

diſſipated

diſſipated in vain and needleſs expences, and poverty be introduced in the place of affluence.—This may be poſſible. It however rarely happens: for there ſeems to be in every nation a greater proportion of induſtry and frugality, which tend to enrich, than of idleneſs and prodigality, which occaſion poverty; ſo that upon the whole there is a continual accumulation. Reflect what Spain, Gaul, Germany, and Britain were in the time of the Romans, inhabited by people little richer than our ſavages; and conſider the wealth they at preſent poſſeſs, in numerous well-built cities, improved farms, rich moveables, magazines ſtocked with valuable manufactures, to ſay nothing of plate, jewels, and coined money; and all this, notwithſtanding their bad, waſteful, plundering governments, and their mad deſtructive wars; and yet luxury and extravagant living have never ſuffered much reſtraint in thoſe countries. Then

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conſider the great proportion of induſtrious frugal farmers inhabiting the interior parts of theſe American ſtates, and of whom the body of our nation conſiſts, and judge whether it is poſſible that the luxury of our ſea-ports can be ſufficient to ruin ſuch a country.—If the importation of foreign luxuries could ruin a people, we ſhould probably have been ruined long ago; for the Britiſh nation claimed a right, and practiſed it, of importing among us not only the ſuperfluities of their own production, but thoſe of every nation under heaven; we bought and conſumed them, and yet we flouriſhed and grew rich. At preſent our independent governments may do what we could not then do, diſcourage by heavy duties, or prevent by heavy prohibitions, ſuch importations, and thereby grow richer; if, indeed, which may admit of diſpute, the deſire of adorning ourſelves with fine clothes, poſſeſſing fine

fine furniture, with elegant houſes, &c. is not, by ſtrongly inciting to labour and induſtry, the occaſion of producing a greater value than is conſumed in the gratification of that deſire.

The agriculture and fiſheries of the United States are the great ſources of our increaſing wealth. He that puts a ſeed into the earth is recompenſed, perhaps, by receiving forty out of it; and he who draws a fiſh out of our water, draws up a piece of ſilver.

Let us (and there is no doubt but we ſhall) be attentive to theſe, and then the power of rivals, with all their reſtraining and prohibiting acts, cannot much hurt us. We are ſons of the earth and ſeas, and, like Antæus in the fable, if in wreſtling with a Hercules we now and then receive a fall, the touch of our parents will communicate to us freſh ſtrength and vigour to renew the conteſt.

INFORMATION TO THOSE WHO WOULD REMOVE TO AMERICA.

MANY perſons in Europe having, directly or by letters, expreſſed to the writer of this, who is well acquainted with North-America, their deſire of tranſporting and eſtabliſhing themſelves in that country; but who appear to him to have formed, through ignorance, miſtaken ideas and expectations of what is to be obtained there; he thinks it may be uſeful, and prevent inconvenient, expenſive, and fruitleſs removals and voyages of improper perſons, if he gives ſome clearer and truer notions of that part of the world than appear to have hitherto prevailed.

He finds it is imagined by numbers, that the inhabitants of North-America

are

are rich, capable of rewarding, and diſpoſed to reward, all ſorts of ingenuity; that they are at the ſame time ignorant of all the ſciences, and conſequently that ſtrangers, poſſeſſing talents in the belles-lettres, fine arts, &c. muſt be highly eſteemed, and ſo well paid as to become eaſily rich themſelves: that there are alſo abundance of profitable offices to be diſpoſed of, which the natives are not qualified to fill; and that having few perſons of family among them, ſtrangers of birth muſt be greatl reſpected, and of courſe eaſily obtain the beſt of thoſe offices, which will make all their fortunes: that the governments, too, to encourage emigrations from Europe, not only pay the expence of perſonal tranſportation, but give lands gratis to ſtrangers, with negroes to work for them, utenſils of huſbandry, and ſtocks of cattle. Theſe are all wild imaginations; and thoſe who go to America with expectations founded

upon them, will ſurely find themſelves diſappointed.

The truth is, that, though there are in that country few people ſo miſerable as the poor of Europe, there are alſo very few that in Europe would be called rich: it is rather a general happy mediocrity that prevails. There are few great proprietors of the ſoil, and few tenants: moſt people cultivate their own lands, or follow ſome handicraft or merchandiſe; very few rich enough to live idly upon their rents or incomes, or to pay the high prices given in Europe for painting, ſtatues, architecture, and the other works of art that are more curious than uſeful. Hence the natural geniuſes that have ariſen in America with ſuch talents, have uniformly quitted that country for Europe, where they can be more ſuitably rewarded. It is true that letters and mathematical knowledge are in eſteem there, but they are at the ſame time more

more common than is apprehended; there being already exiſting nine colleges, or univerſities, viz. four in New-England, and one in each of the provinces of New-York, New-Jerſey, Pennſylvania, Maryland, and Virginia, all furniſhed with learned profeſſors; beſides a number of ſmaller academies: theſe educate many of their youth in the languages, and thoſe ſciences that qualify men for the profeſſions of divinity, law, or phyſic. Strangers, indeed, are by no means excluded from exerciſing thoſe profeſſions; and the quick increaſe of inhabitants every where gives them a chance of employ, which they have in common with the natives. Of civil offices, or employments, there are few; no ſuperfluous ones as in Europe; and it is a rule eſtabliſhed in ſome of the ſtates, that no office ſhould be ſo profitable as to make it deſirable. The 36th article of the conſtitution of Pennſylvania

nia runs expreſsly in theſe words: "As "every freeman, to preſerve his indepen- "dence (if he has not a ſufficient eſtate), "ought to have ſome profeſſion, calling, "trade, or farm, whereby he may ho- "neſtly ſubſiſt, there can be no neceſſity "for, nor uſe in, eſtabliſhing offices of "profit; the uſual effects of which are "dependence and ſervility, unbecoming "freemen, in the poſſeſſors and ex- "pectants; faction, contention, corrup- "tion and diſorder among the peo- "ple. Wherefore, whenever an office, "through increaſe of fees or otherwiſe, "becomes ſo profitable as to occaſion "many to apply for it, the profits ought "to be leſſened by the legiſlature."

Theſe ideas prevailing more or leſs in all the United States, it cannot be worth any man's while, who has a means of living at home, to expatriate himſelf in hopes of obtaining a profitable civil office in America; and as to military offices, they

they are at an end with the war, the armies being diſbanded. Much leſs is it adviſable for a perſon to go thither, who has no other quality to recommend him but his birth. In Europe it has indeed its value; but it is a commodity that cannot be carried to a worſe market than to that of America, where people do not enquire concerning a ſtranger, *What is he?* but *What can he do?* If he has any uſeful art, he is welcome; and if he exerciſes it, and behaves well, he will be reſpected by all that know him; but a mere man of quality, who on that account wants to live upon the public by ſome office or ſalary, will be deſpiſed and diſregarded. The huſbandman is in honour there, and even the mechanic, becauſe their employments are uſeful. The people have a ſaying, that God Almighty is himſelf a mechanic, the greateſt in the univerſe; and he is reſpected and admired

admired more for the variety, ingenuity, and utility of his handiworks, than for the antiquity of his family. They are pleaſed with the obſervation of a negro, and frequently mention it, that Boccarorra (meaning the white man) make de black man workee, make de horſe workee, make de ox workee, make ebery ting workee; only de hog. He de hog, no workee; he eat, he drink, he walk about, he go to ſleep when he pleaſe, he libb like a gentleman. According to theſe opinions of the Americans, one of them would think himſelf more obliged to a genealogiſt, who could prove for him that his anceſtors and relations for ten generations had been ploughmen, ſmiths, carpenters, turners, weavers, tanners, or even ſhoemakers, and conſequently that they were uſeful members of ſociety, than if he could only prove that they were gentlemen, doing nothing

of

of value, but living idly on the labour of others, mere *fruges conſumere nati* *, and otherwiſe *good* for *nothing*, till by their death their eſtates, like the carcaſe of the negro's gentleman-hog, come to be *cut up*.

With regard to encouragements for ſtrangers from government, they are really only what are derived from good laws and liberty. Strangers are welcome becauſe there is room enough for them all, and therefore the old inhabitants are not jealous of them; the laws protect them ſufficiently, ſo that they have no need of the patronage of great men; and every one will enjoy ſecurely the profits of his induſtry. But if he does not bring a fortune with him, he muſt work and be induſtrious to live. One or two years reſidence gives him all the rights of

* . . . . . born
Merely to eat up the corn. WATTS.

a citizen;

a citizen; but the government does not at preſent, whatever it may have done in former times, hire people to become ſettlers, by paying their paſſages, giving land, negroes, utenſils, ſtock, or any other kind of emolument whatſoever. In ſhort, America is the land of labour, and by no means what the Engliſh call *Lubberland*, and the French *Pays de Cocagne*, where the ſtreets are ſaid to be paved with half-peck loaves, the houſes tiled with pancakes, and where the fowls fly about ready roaſted, crying, *Come eat me!*

Who then are the kind of perſons to whom an emigration to America may be advantageous? And what are the advantages they may reaſonably expect?

Land being cheap in that country, from the vaſt foreſts ſtill void of inhabitants, and not likely to be occupied in an age to come, inſomuch that the propriety of an hundred acres of fertile ſoil full of

wood may be obtained near the frontiers, in many places, for eight or ten guineas, hearty young labouring men, who underſtand the huſbandry of corn and cattle, which is nearly the ſame in that country as in Europe, may eaſily eſtabliſh themſelves there. A little money ſaved of the good wages they receive there while they work for others, enables them to buy the land and begin their plantation, in which they are aſſiſted by the good-will of their neighbours, and ſome credit. Multitudes of poor people from England, Ireland, Scotland, and Germany, have by this means in a few years become wealthy farmers, who in their own countries, where all the lands are fully occupied, and the wages of labour low, could never have emerged from the mean condition wherein they were born.

From the ſalubrity of the air, the healthineſs of the climate, the plenty of good

good proviſions, and the encouragement to early marriages by the certainty of ſubſiſtence in cultivating the earth, the increaſe of inhabitants by natural generation is very rapid in America, and becomes ſtill more ſo by the acceſſion of ſtrangers: hence there is a continual demand for more artiſans of all the neceſſary and uſeful kinds, to ſupply thoſe cultivators of the earth with houſes, and with furniture and utenſils of the groſſer ſorts, which cannot ſo well be brought from Europe. Tolerably good workmen in any of thoſe mechanic arts are ſure to find employ, and to be well paid for their work; there being no reſtraints preventing ſtrangers from exerciſing any art they underſtand, nor any permiſſion neceſſary. If they are poor, they begin firſt as ſervants or journeymen; and if they are ſober, induſtrious, and frugal, they ſoon become maſters, eſtabliſh themſelves in buſineſs, marry, raiſe

raiſe families, and become reſpectable citizens.

Alſo, perſons of moderate fortunes and capitals, who, having a number of children to provide for, are deſirous of bringing them up to induſtry, and to ſecure eſtates for their poſterity, have opportunities of doing it in America, which Europe does not afford. There they may be taught and practiſe profitable mechanic arts, without incurring diſgrace on that account; but on the contrary acquiring reſpect by ſuch abilities. There ſmall capitals laid out in lands, which daily become more valuable by the increaſe of people, afford a ſolid proſpect of ample fortunes thereafter for thoſe children. The writer of this has known ſeveral inſtances of large tracts of land, bought on what was then the frontier of Pennſylvania, for ten pounds per hundred acres, which, after twenty years, when the ſettlements had

been extended far beyond them, ſold readily, without any improvement made upon them, for three pounds per acre. The acre in America is the ſame with the Engliſh acre, or the acre of Normandy.

Thoſe who deſire to underſtand the ſtate of government in America would do well to read the conſtitutions of the ſeveral ſtates, and the articles of confederation that bind the whole together for general purpoſes, under the direction of one aſſembly, called the Congreſs. Theſe conſtitutions have been printed by order of Congreſs, in America; two editions of them have alſo been printed in London; and a good tranſlation of them into French has lately been publiſhed at Paris.

Several of the princes of Europe, of late, from an opinion of advantage to ariſe by producing all commodities and manufactures within their own

own dominions, ſo as to diminiſh or render uſeleſs their importations, have endeavoured to entice workmen from other countries, by high ſalaries, privileges, &c. Many perſons pretending to be ſkilled in various great manufactures, imagining that America muſt be in want of them, and that the Congreſs would probably be diſpoſed to imitate the princes above mentioned, have propoſed to go over, on condition of having their paſſages paid, lands given, ſalaries appointed, excluſive privileges for terms of years, &c. Such perſons, on reading the articles of confederation, will find that the Congreſs have no power committed to them, or money put into their hands, for ſuch purpoſes; and that if any ſuch encouragement is given, it muſt be by the government of ſome ſeparate ſtate. This, however, has rarely been done in America; and when it has been done, it has rarely ſucceeded, ſo as to eſtabliſh

a manufacture which the country was not yet ſo ripe for as to encourage private perſons to ſet it up; labour being generally too dear there, and hands difficult to be kept together, every one deſiring to be a maſter, and the cheapneſs of land inclining many to leave trades for agriculture. Some indeed have met with ſucceſs, and are carried on to advantage; but they are generally ſuch as require only a few hands, or wherein great part of the work is performed by machines. Goods that are bulky, and of ſo ſmall value as not well to bear the expence of freight, may often be made cheaper in the country than they can be imported; and the manufacture of ſuch goods will be profitable wherever there is a ſufficient demand. The farmers in America produce indeed a good deal of wool and flax: and none is exported, it is all worked up; but it is in the way of domeſtic manufacture, for the uſe of the family.

The

The buying up quantities of wool and flax, with the deſign to employ ſpinners, weavers, &c. and form great eſtabliſhments, producing quantities of linen and woollen goods for ſale, has been ſeveral times attempted in different provinces; but thoſe projects have generally failed, goods of equal value being imported cheaper. And when the governments have been ſolicited to ſupport ſuch ſchemes by encouragements, in money, or by impoſing duties on importation of ſuch goods, it has been generally refuſed, on this principle, that if the country is ripe for the manufacture, it may be carried on by private perſons to advantage; and if not, it is a folly to think of forcing nature. Great eſtabliſhments of manufacture require great numbers of poor to do the work for ſmall wages; thoſe poor are to be found in Europe, but will not be found in America, till the lands are all taken up and cultivated, and the

exceſs of people who cannot get land want employment. The manufacture of ſilk, they ſay, is natural in France, as that of cloth in England, becauſe each country produces in plenty the firſt material: but if England will have a manufacture of ſilk, as well as that of cloth, and France of cloth as well as that of ſilk, theſe unnatural operations muſt be ſupported by mutual prohibitions, or high duties on the importation of each other's goods; by which means the workmen are enabled to tax the home conſumer by greater prices, while the higher wages they receive make them neither happier nor richer, ſince they only drink more and work leſs. Therefore the governments in America do nothing to encourage ſuch projects. The people, by this means, are not impoſed on either by the merchant or mechanic: if the merchant demands too much profit on imported ſhoes, they buy of the ſhoemaker;

maker; and if he aſks too high a price, they take them of the merchant: thus the two profeſſions are checks on each other. The ſhoemaker, however, has, on the whole, a conſiderable profit upon his labour in America, beyond what he had in Europe, as he can add to his price a ſum nearly equal to all the expences of freight and commiſſion, riſque or inſurance, &c. neceſſarily charged by the merchant. And the caſe is the ſame with the workmen in every other mechanic art. Hence it is, that artiſans generally live better and more eaſily in America than in Europe; and ſuch as are good œconomiſts make a comfortable proviſion for age, and for their children. Such may, therefore, remove with advantage to America.

In the old long-ſettled countries of Europe, all arts, trades, profeſſions, farms, &c. are ſo full, that it is difficult for a poor man who has children, to

place them where they may gain, or learn to gain, a decent livelihood. The artiſans, who fear creating future rivals in buſineſs, refuſe to take apprentices, but upon conditions of money, maintenance, or the like, which the parents are unable to comply with. Hence the youth are dragged up in ignorance of every gainful art, and obliged to become ſoldiers, or ſervants, or thieves, for a ſubſiſtence. In America, the rapid increaſe of inhabitants takes away that fear of rivalſhip, and artiſans willingly receive apprentices from the hope of profit by their labour, during the remainder of the time ſtipulated, after they ſhall be inſtructed. Hence it is eaſy for poor families to get their children inſtructed; for the artiſans are ſo deſirous of apprentices, that many of them will even give money to the parents, to have boys from ten to fifteen years of age bound apprentices to them, till the age of

of twenty-one; and many poor parents have by that means, on their arrival in the country, raiſed money enough to buy land ſufficient to eſtabliſh themſelves, and to ſubſiſt the reſt of their family by agriculture. Theſe contracts for apprentices are made before a magiſtrate, who regulates the agreement according to reaſon and juſtice; and having in view the formation of a future uſeful citizen, obliges the maſter to engage by a written indenture, not only that, during the time of ſervice ſtipulated, the apprentice ſhall be duly provided with meat, drink, apparel, waſhing, and lodging, and at its expiration with a complete new ſuit of clothes, but alſo that he ſhall be taught to read, write, and caſt accounts; and that he ſhall be well inſtructed in the art or profeſſion of his maſter, or ſome other, by which he may afterwards gain a livelihood, and be able in his turn to raiſe a family. A

copy

copy of this indenture is given to the apprentice or his friends, and the magiſtrate keeps a record of it, to which recourſe may be had, in caſe of failure by the maſter in any point of performance. This deſire among the maſters to have more hands employed in working for them, induces them to pay the paſſages of young perſons, of both ſexes, who, on their arrival, agree to ſerve them one, two, three, or four years; thoſe who have already learned a trade, agreeing for a ſhorter term, in proportion to their ſkill, and the conſequent immediate value of their ſervice; and thoſe who, have none, agreeing for a longer term, in conſideration of being taught an art their poverty would not permit them to acquire in their own country.

The almoſt general mediocrity of fortune that prevails in America, obliging its people to follow ſome buſineſs for ſubſiſtence, thoſe vices that ariſe uſually from

from idleneſs, are in a great meaſure prevented. Induſtry and conſtant employment are great preſervatives of the morals and virtue of a nation. Hence bad examples to youth are more rare in America, which muſt be a comfortable conſideration to parents. To this may be truly added, that ſerious religion, under its various denominations, is not only tolerated, but reſpected and practiſed. Atheiſm is unknown there; infidelity rare and ſecret; ſo that perſons may live to a great age in that country without having their piety ſhocked by meeting with either an atheiſt or an infidel. And the Divine Being ſeems to have manifeſted his approbation of the mutual forbearance and kindneſs with which the different ſects treat each other, by the remarkable proſperity with which he has been pleaſed to favour the whole country.

FINAL

FINAL SPEECH OF DR. FRANKLIN IN THE LATE FEDERAL CONVENTION *.

MR. PRESIDENT,

I CONFESS that I do not entirely approve of this conſtitution at preſent: but, Sir, I am not ſure I ſhall never approve it: for having lived long, I have experienced many inſtances of being obliged by better information, or fuller conſideration, to change opinions even on important ſubjects, which I once thought right, but found to be otherwiſe. It is, therefore, that the older I grow, the more apt I am to doubt my own

* Our reaſons for aſcribing this ſpeech to Dr. Franklin, are its internal evidence, and its having appeared with his name during his life-time, uncontradicted, in an American periodical publication.

judgment,

judgment, and to pay more reſpect to the judgment of others. Moſt men, indeed, as well as moſt ſects in religion, think themſelves in poſſeſſion of all truth, and that whenever others differ from them, it is ſo far error. Steel, a proteſtant, in a dedication, tells the pope, that "the only difference between our two "churches, in their opinions of the cer-"tainty of their doctrines, is, the Romiſh "church is infallible, and the church "of England never in the wrong." But, though many private perſons think almoſt as highly of their own infallibility as of that of their ſect, few expreſs it ſo naturally as a certain French lady, who, in a little diſpute with her ſiſter, ſaid, I don't know how it happens, ſiſter, but I meet with nobody but myſelf that is always in the right. *Il n'y a que moi qui a toujours raiſon.* In theſe ſentiments, Sir, I agree to this conſtitution, with all its faults, if they are ſuch; becauſe I think

think a general government neceſſary for us, and there is no form of government but what may be a bleſſing, if well adminiſtered; and I believe farther, that this is likely to be well adminiſtered for a courſe of years, and can only end in deſpotiſm, as other forms have done before it, when the people ſhall become ſo corrupted as to need deſpotic government, being incapable of any other. I doubt, too, whether any other convention we can obtain, may be able to make a better conſtitution. For when you aſſemble a number of men, to have the advantage of their joint wiſdom, you inevitably aſſemble with thoſe men all their prejudices, their paſſions, their errors of opinion, their local intereſts, and their ſelfiſh views. From ſuch an aſſembly can a profect production be expected? It therefore aſtoniſhes me, Sir, to find this ſyſtem approaching ſo near to perfection as it does; and I think it will aſtoniſh

our enemies, who are waiting with confidence to hear that our councils are confounded, like thoſe of the builders of Babylon, and that our ſtates are on the point of ſeparation, only to meet hereafter for the purpoſe of cutting each other's throats.

Thus I conſent, Sir, to this conſtitution, becauſe I expect no better, and becauſe I am not ſure that this is not the beſt. The opinions I have had of its errors, I ſacrifice to the public good. I have never whiſpered a ſyllable of them abroad. Within theſe walls they were born; and here they ſhall die. If every one of us, in returning to our conſtituents, were to report the objections he has had to it, and endeavour to gain partiſans in ſupport of them, we might prevent its being generally received, and thereby loſe all the ſalutary effects and great advantages reſulting naturally in our favour among foreign nations, as well as among

among ourſelves, from our real or apparent unanimity. Much of the ſtrength and efficiency of any government, in procuring and ſecuring happineſs to the people, depends on opinion; on the general opinion of the goodneſs of that government, as well as of the wiſdom and integrity of its governors.

I hope, therefore, that for our own ſakes as a part of the people, and for the ſake of our poſterity, we ſhall act heartily and unanimouſly in recommending this conſtitution, wherever our influence may extend, and turn our future thoughts and endeavours to the means of having it well adminiſtered.

On the whole, Sir, I cannot help expreſſing a wiſh, that every member of the convention, who may ſtill have objections, would with me, on this occaſion, doubt a little of his own infallibility, and, to make manifeſt our unanimity, put his name to this inſtrument.

[The

[The motion was then made for adding the laſt formula, viz.

Done in Convention, by the unanimous conſent, &c.: which was agreed to, and added accordingly.]

SKETCH OF AN ENGLISH SCHOOL:

For the Conſideration of the Truſtees of the Philadelphia Academy.

IT is expected that every ſcholar to be admitted into this ſchool, be at leaſt able to pronounce and divide the ſyllables in reading, and to write a legible hand. None to be received that are under years of age.

FIRST, OR LOWEST CLASS.

Let the firſt claſs learn the Engliſh Grammar rules, and at the ſame time let particular care be taken to improve them in orthography. Perhaps the latter is beſt

beſt done by pairing the ſcholars; two of thoſe neareſt equal in their ſpelling to be put together. Let theſe ſtrive for victory; each propounding ten words every day to the other to be ſpelled. He that ſpells truly moſt of the other's words, is victor for that day; he that is victor moſt days in a month, to obtain a prize, a pretty neat book of ſome kind, uſeful in their future ſtudies. This method fixes the attention of children extremely to the orthography of words, and makes them good ſpellers very early. It is a ſhame for a man to be ſo ignorant of this little art, in his own language, as to be perpetually confounding words of like ſound and different ſignifications; the conſciouſneſs of which defect makes ſome men, otherwiſe of good learning and underſtanding, averſe to writing even a common letter.

Let the pieces read by the ſcholars in

this claſs be ſhort; ſuch as Croxal's fables and little ſtories. In giving the leſſon, let it be read to them; let the meaning of the difficult words in it be explained to them; and let them con over by themſelves before they are called to read to the maſter or uſher; who is to take particular care that they do not read too faſt, and that they duly obſerve the ſtops and pauſes. A vocabulary of the moſt uſual difficult words might be formed for their uſe, with explanations; and they might daily get a few of thoſe words and explanations by heart, which would a little exerciſe their memories; or at leaſt they might write a number of them in a ſmall book for the purpoſe, which would help to fix the meaning of thoſe words in their minds, and at the ſame time furniſh every one with a little dictionary for his future uſe.

THE SECOND CLASS

To be taught reading with attention, and with proper modulations of the voice; according to the ſentiment and the ſubject.

Some ſhort pieces, not exceeding the length of a Spectator, to be given this claſs for leſſons (and ſome of the eaſier Spectators would be very ſuitable for the purpoſe). Theſe leſſons might be given every night as taſks; the ſcholars to ſtudy them againſt the morning. Let it then be required of them to give an account, firſt of the parts of ſpeech, and conſtruction of one or two ſentences. This will oblige them to recur frequently to their grammar, and fix its principal rules in their memory. Next, of the intention of the writer, or the ſcope of the piece, the meaning of each ſentence, and of every uncommon word. This would early acquaint them with the

meaning and force of words, and give them that moſt neceſſary habit, of reading with attention.

The maſter then to read the piece with the proper modulations of voice, due emphaſis, and ſuitable action, where action is required; and put the youth on imitating his manner.

Where the author has uſed an expreſſion not the beſt, let it be pointed out; and let his beauties be particularly remarked to the youth.

Let the leſſons for reading be varied, that the youth may be made acquainted with good ſtyles of all kinds in proſe and verſe, and the proper manner of reading each kind—ſometimes a well-told ſtory, a piece of a ſermon, a general's ſpeech to his ſoldiers, a ſpeech in a tragedy, ſome part of a comedy, an ode, a ſatire, a letter, blank verſe, Hudibraſtic, heroic, &c. But let ſuch leſſons be choſen for reading, as contain ſome uſeful inſtruc-

tion,

tion, whereby the underſtanding or morals of the youth may at the ſame time be improved.

It is required that they ſhould firſt ſtudy and underſtand the leſſons, before they are put upon reading them properly; to which end each boy ſhould have an Engliſh dictionary, to help him over difficulties. When our boys read Engliſh to us, we are apt to imagine they underſtand what they read, becauſe we do, and becauſe it is their mother tongue. But they often read, as parrots ſpeak, knowing little or nothing of the meaning. And it is impoſſible a reader ſhould give the due modulation to his voice, and pronounce properly, unleſs his underſtanding goes before his tongue, and makes him maſter of the ſentiment. Accuſtoming boys to read aloud what they do not firſt underſtand, is the cauſe of thoſe even ſet tones ſo common among readers, which, when they have once got

a habit of uſing, they find ſo difficult to correct; by which means, among fifty readers we ſcarcely find a good one. For want of good reading, pieces publiſhed with a view to influence the minds of men, for their own or the public benefit, loſe half their force. Were there but one good reader in a neighbourhood, a public orator might be heard throughout a nation with the ſame advantages, and have the ſame effect upon his audience, as if they ſtood within the reach of his voice.

THE THIRD CLASS

To be taught ſpeaking properly and gracefully; which is near akin to good reading, and naturally follows it in the ſtudies of youth. Let the ſcholars of this claſs begin with learning the elements of rhetoric from ſome ſhort ſyſtem, ſo as to be able to give an account of the moſt uſeful tropes and figures. Let all their bad habits of ſpeaking, all

offences

offences againſt good grammar, all corrupt or foreign accents, and all improper phraſes, be pointed out to them. Short ſpeeches from the Roman or other hiſtory, or from the parliamentary debates, might be got by heart, and delivered with the proper action, &c. Speeches and ſcenes in our beſt tragedies and comedies (avoiding every thing that could injure the morals of youth) might likewiſe be got by rote, and the boys exerciſed in delivering or acting them; great care being taken to form their manner after the trueſt models.

For their farther improvement, and a little to vary their ſtudies, let them now begin to read hiſtory, after having got by heart a ſhort table of the principal epochas in chronology. They may begin with Rollin's ancient and Roman hiſtories, and proceed at proper hours, as they go through the ſubſequent claſſes, with the beſt hiſtories of our own nation

and

and colonies. Let emulation be excited among the boys, by giving, weekly, little prizes, or other ſmall encouragements, to thoſe who are able to give the beſt account of what they have read, as to times, places, names of perſons, &c. This will make them read with attention, and imprint the hiſtory well in their memories. In remarking on the hiſtory, the maſter will have fine opportunities of inſtilling inſtruction of various kinds, and improving the morals, as well as the underſtandings, of youth.

The natural and mechanic hiſtory, contained in the *Spectacle de la Nature*, might alſo be begun in this claſs, and continued through the ſubſequent claſſes, by other books of the ſame kind; for, next to the knowledge of duty, this kind of knowledge is certainly the moſt uſeful, as well as the moſt entertaining. The merchant may thereby be enabled better to underſtand many commodities in trade;

trade; the handicraftſman to improve his buſineſs by new inſtruments, mixtures and materials; and frequently hints are given for new manufactures, or new methods of improving land, that may be ſet on foot greatly to the advantage of a country.

THE FOURTH CLASS

To be taught compoſition. Writing one's own language well, is the next neceſſary accompliſhment after good ſpeaking. It is the writing-maſter's buſineſs to take care that the boys make fair characters, and place them ſtraight and even in the lines: but to form their ſtyle, and even to take care that the ſtops and capitals are properly diſpoſed, is the part of the Engliſh maſter. The boys ſhould be put on writing letters to each other on any common occurrences, and on various ſubjects, imaginary buſineſs, &c. containing little ſtories, accounts of their late

late reading, what parts of authors pleaſe them, and why; letters of congratulation, of compliment, of requeſt, of thanks, of recommendation, of admonition, of conſolation, of expoſtulation, excuſe, &c. In theſe they ſhould be taught to expreſs themſelves clearly, conciſely and naturally, without affected words or high-flown phraſes. All their letters to paſs through the maſter's hand, who is to point out the faults, adviſe the corrections, and commend what he finds right. Some of the beſt letters publiſhed in our own language, as Sir William Temple's, thoſe of Pope and his friends, and ſome others, might be ſet before the youth as models, their beauties pointed out and explained by the maſter, the letters themſelves tranſcribed by the ſcholar.

Dr. Johnſon's *Ethices Elementa*, or Firſt Principles of Morality, may now be read by the ſcholars, and explained by the

the maſter, to lay a ſolid foundation of virtue and piety in their minds. And as this claſs continues the reading of hiſtory, let them now, at proper hours, receive ſome farther inſtruction in chronology, and in that part of geography (from the mathematical maſter) which is neceſſary to underſtand the maps and globes. They ſhould alſo be acquainted with the modern names of the places they find mentioned in ancient writers. The exerciſes of good reading, and proper ſpeaking, ſtill continued at ſuitable times.

FIFTH CLASS.

To improve the youth in compoſition, they may now, beſides continuing to write letters, begin to write little eſſays in proſe, and ſometimes in verſe; not to make them poets, but for this reaſon, that nothing acquaints a lad ſo ſpeedily with variety of expreſſion, as the neceſſity of finding ſuch words and phraſes as

will ſuit the meaſure, ſound and rhime of verſe, and at the ſame time well expreſs the ſentiment. Theſe eſſays ſhould all paſs under the maſter's eye, who will point out their faults, and put the writer on correcting them. Where the judgment is not ripe enough for forming new eſſays, let the ſentiments of a Spectator be given, and required to be clothed in the ſcholar's own words: or the circumſtances of ſome good ſtory; the ſcholar to find expreſſion. Let them be put ſometimes on abridging a paragraph of a diffuſe author: ſometimes on dilating or amplifying what is wrote more cloſely. And now let Dr. Johnſon's *Noetica*, or Firſt Principles of Human Knowledge, containing a logic, or art of reaſoning, &c. be read by the youth, and the difficulties that may occur to them be explained by the maſter. The reading of hiſtory, and the exerciſes of good reading and juſt ſpeaking, ſtill continued.

SIXTH

SIXTH CLASS.

In this claſs, beſides continuing the ſtudies of the preceding in hiſtory, rhetoric, logic, moral and natural philoſophy, the beſt Engliſh authors may be read and explained; as Tillotſon, Milton, Locke, Addiſon, Pope, Swift, the higher papers in the Spectator and Guardian, the beſt tranſlations of Homer, Virgil and Horace, of Telemachus, Travels of Cyrus, &c.

Once a year let there be public exerciſes in the hall; the truſtees and citizens preſent. Then let fine gilt books be given as prizes to ſuch boys as diſtinguiſh themſelves, and excel the others in any branch of learning, making three degrees of compariſon: giving the beſt prize to him that performs beſt; a leſs valuable one to him that comes up next to the beſt; and another to the third. Commendations, encouragement, and advice

advice to the reſt; keeping up their hopes, that, by induſtry, they may excel another time. The names of thoſe that obtain the prize, to be yearly printed in a liſt.

The hours of each day are to be divided and diſpoſed in ſuch a manner as that ſome claſſes may be with the writing-maſter, improving their hands; others with the mathematical maſter, learning arithmetic, accounts, geography, uſe of the globes, drawing, mechanics, &c.; while the reſt are in the Engliſh ſchool, under the Engliſh maſter's care.

Thus inſtructed, youth will come out of this ſchool fitted for learning any buſineſs, calling, or profeſſion, except ſuch wherein languages are required; and though unacquainted with any ancient or foreign tongue, they will he maſters of their own, which is of more immediate and general uſe; and withal will have attained many other valuable accompliſh-

ments:

ments: the time uſually ſpent in acquiring thoſe languages, often without ſucceſs, being here employed in laying ſuch a foundation of knowledge and ability, as, properly improved, may qualify them to paſs through and execute the ſeveral offices of civil life, with advantage and reputation to themſelves and country.

ON THE THEORY OF THE EARTH.

TO ABBÉ SOULIAVE.

PASSY, September 22, 1782.

SIR,

I RETURN the papers with ſome corrections. I did not find coal mines under the calcareous rock in Derbyſhire. I only remarked, that at the loweſt part of that rocky mountain, which was in ſight, there were oyſter ſhells mixed with the ſtone; and part of the high county of Derby being probably as much above the level of the ſea, as the coal mines of Whitehaven were below, it ſeemed a proof that there had been a great bouleverſement in the ſurface of that iſland, ſome part of it having been depreſſed under the ſea, and other parts, which had been under it,

being raiſed above it. Such changes in the ſuperficial parts of the globe ſeemed to me unlikely to happen, if the earth were ſolid to the centre. I therefore imagined that the internal parts might be a fluid more denſe, and of greater ſpecific gravity than any of the ſolids we are acquainted with; which therefore might ſwim in or upon that fluid. Thus the ſurface of the globe would be a ſhell, capable of being broken and diſordered by the violent movements of the fluid on which it reſted. And, as air has been compreſſed by art ſo as to be twice as denſe as water, in which caſe, if ſuch air and water could be contained in a ſtrong glaſs veſſel, the air would be ſeen to take the loweſt place, and the water to float above and upon it; and, as we know not yet the degree of denſity to which air may be compreſſed, and M. Amontons calculated, that, its denſity increaſing as it approached the centre in the ſame proportion as above

the ſurface, it would, at the depth of leagues, be heavier than gold, poſſibly the denſe fluid occupying the internal parts of the globe might be air compreſſed. And as the force of expanſion in denſe air when heated, is in proportion to its denſity; this central air might afford another agent to move the ſurface, as well as be of uſe in keeping alive the central fires; though, as you obſerve, the ſudden rarefaction of water, coming into contact with thoſe fires, may be an agent ſufficiently ſtrong for that purpoſe, when acting between the incumbent earth and the fluid on which it reſts.

If one might indulge imagination in ſuppoſing how ſuch a globe was formed, I ſhould conceive, that all the elements in ſeparate particles, being originally mixed in confuſion, and occupying a great ſpace, they would (as ſoon as the Almighty fiat ordained gravity, or the mutual

mutual attraction of certain parts, and the mutual repulsion of other parts, to exist) all move towards their common centre: that the air being a fluid whose parts repel each other, though drawn to the common centre by their gravity, would be densest towards the centre, and rarer as more remote; consequently, all bodies, lighter than the central parts of that air, and immersed in it, would recede from the centre, and rise till they arrived at that region of the air, which was of the same specific gravity with themselves, where they would rest; while other matter, mixed with the lighter air, would descend, and the two, meeting, would form the shell of the first earth, leaving the upper atmosphere nearly clear. The original movement of the parts towards their common centre would form a whirl there; which would continue in the turning of the new-formed globe upon its axis, and the greatest diameter of the shell

would be in its equator. If by any accident afterwards the axis ſhould be changed, the denſe internal fluid, by altering its form, muſt burſt the ſhell, and throw all its ſubſtance into the confuſion in which we find it. I will not trouble you at preſent with my fancies concerning the manner of forming the reſt of our ſyſtem. Superior beings ſmile at our theories, and at our preſumption in making them. I will juſt mention that your obſervation of the ferruginous nature of the lava, which is thrown out from the depths of our volcanoes, gave me great pleaſure. It has long been a ſuppoſition of mine, that the iron contained in the ſubſtance of the globe has made it capable of becoming, as it is, a great magnet; that the fluid of magnetiſm exiſts perhaps in all ſpace; ſo that there is a magnetical North and South of the univerſe, as well as of this globe; and that if it were poſſible for a man to fly from ſtar to ſtar, he might

might govern his courſe by the compaſs; that it was by the power of this general magnetiſm this globe became a particular magnet. In ſoft or hot iron the fluid of magnetiſm is naturally diffuſed equally: when within the influence of a magnet, it is drawn to one end of the iron, made denſer there and rarer at the other. While the iron continues ſoft and hot, it is only a temporary magnet: if it cools or grows hard in that ſituation, it becomes a permanent one, the magnetic fluid not eaſily reſuming its equilibrium. Perhaps it may be owing to the permanent magnetiſm of this globe, which it had not at firſt, that its axis is at preſent kept parallel to itſelf, and not liable to the changes it formerly ſuffered, which occaſioned the rupture of its ſhell, the ſubmerſions and emerſions of its lands, and the confuſion of its ſeaſons. The preſent polar and equatorial diameters differing from each other near ten leagues, it is eaſy to

conceive, in caſe ſome power ſhould ſhift the axis gradually, and place it in the preſent equator, and make the new equator paſs through the preſent poles, what a ſinking of the waters would happen in the preſent equatorial regions, and what a riſing in the preſent polar regions; ſo that vaſt tracts would be diſcovered that now are under water, and others covered that now are dry, the water riſing and ſinking in the different extremes near five leagues! Such an operation as this poſſibly occaſioned much of Europe, and among the reſt this mountain of Paſſy on which I live, and which is compoſed of limeſtone, rock and ſea-ſhells, to be abandoned by the ſea, and to change its ancient climate, which ſeems to have been a hot one. The globe being now become a perfect magnet, we are perhaps ſafe from any future change of its axis. But we are ſtill ſubject to the accidents on the ſurface, which are occaſioned by a wave in the internal ponder-

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ous fluid: and ſuch a wave is produced by the ſudden violent exploſion you mention, happening from the junction of water and fire under the earth, which not only lifts the incumbent earth that is over the exploſion, but, impreſſing with the ſame force the fluid under it, creates a wave that may run a thouſand leagues, lifting, and thereby ſhaking ſucceſſively, all the countries under which it paſſes. I know not whether I have expreſſed myſelf ſo clearly, as not to get out of your ſight in theſe reveries. If they occaſion any new enquiries, and produce a better hypotheſis, they will not be quite uſeleſs. You ſee I have given a looſe to imagination, but I approve much more your method of philoſophizing, which proceeds upon actual obſervation, makes a collection of facts, and concludes no farther than thoſe facts will warrant. In my preſent circumſtances, that mode of ſtudying the nature of the globe is out of my power,

power, and therefore I have permitted myſelf to wander a little in the wilds of fancy. With great eſteem, I have the honour to be, Sir, &c.

B. FRANKLIN.

P. S. I have heard that chemiſts can by their art decompoſe ſtone and wood, extracting a conſiderable quantity of water from the one, and air from the other. It ſeems natural to conclude from this, that water and air were ingredients in their original compoſition: for men cannot make new matter of any kind. In the ſame manner may we not ſuppoſe, that when we conſume combuſtibles of all kinds, and produce heat or light, we do not create that heat or light, we only decompoſe a ſubſtance which received it originally as a part of its compoſition? Heat may thus be conſidered as originally in a fluid ſtate; but, attracted by organized bodies in their growth, becomes a

part

part of the ſolid. Beſides this, I can conceive that, in the firſt aſſemblage of the particles of which this earth is compoſed, each brought its portion of the looſe heat that had been connected with it, and the whole, when preſſed together, produced the internal fire which ſtill ſubſiſts.

LOOSE THOUGHTS ON AN UNIVERSAL FLUID, ETC.

PASSY, June 25, 1784.

UNIVERSAL ſpace, as far as we know of it, ſeems to be filled with a ſubtile fluid, whoſe motion, or vibration, is called light.

This fluid may poſſibly be the ſame with that which, being attracted by and entering into other more ſolid matter, dilates the ſubſtance, by ſeparating the conſtituent particles, and ſo rendering ſome ſolids fluid, and maintaining the fluidity of others; of which fluid when our bodies are totally deprived, they are ſaid to be frozen: when they have a proper quantity, they are in health, and fit to perform all their functions; it is then called natural heat: when too much,

much, it is called fever; and when forced into the body in too great a quantity from without, it gives pain by ſeparating and deſtroying the fleſh, and is then called burning; and the fluid ſo entering and acting is called fire.

While organized bodies, animal or vegetable, are augmenting in growth, or are ſupplying their continual waſte, is not this done by attracting and conſolidating this fluid called fire, ſo as to form of it a part of their ſubſtance? and is it not a ſeparation of the parts of ſuch ſubſtance, which, diſſolving its ſolid ſtate, ſets that ſubtile fluid at liberty, when it again make its appearance as fire?

For the power of man relative to matter ſeems limited to the dividing it, or mixing the various kinds of it, or changing its form and appearance by different compoſitions of it; but does not extend to the making or creating of new matter, or annihilating the old: thus,

if

if fire be an original element, or kind of matter, its quantity is fixed and permanent in the world. We cannot deſtroy any part of it, or make addition to it; we can only ſeparate it from that which confines it, and ſo ſet it at liberty, as when we put wood in a ſituation to be burnt; or transfer it from one ſolid to another, as when we make lime by burning ſtone, a part of the fire diſlodged from the wood being left in the ſtone. May not this fluid, when at liberty, be capable of penetrating and entering into all bodies, organized or not; quitting eaſily in totality thoſe not organized; and quitting eaſily in part thoſe which are; the part aſſumed and fixed remaining till the body is diſſolved?

Is it not this fluid which keeps aſunder the particles of air, permitting them to approach, or ſeparating them more, in proportion as its quantity is diminiſhed or augmented? Is it not the greater gravity of

of the particles of air, which forces the particles of this fluid to mount with the matters to which it is attached, as ſmoke or vapour?

Does it not ſeem to have a great affinity with water, ſince it will quit a ſolid to unite with that fluid, and go off with it in vapour, leaving the ſolid cold to the touch, and the degree meaſurable by the thermometer?

The vapour riſes attached to this fluid; but at a certain height they ſeparate, and the vapour deſcends in rain, retaining but little of it, in ſnow or hail leſs. What becomes of that fluid? Does it riſe above our atmoſphere, and mix equally with the univerſal maſs of the ſame kind? Or does a ſpherical ſtratum of it, denſer, or leſs mixed with air, attracted by this globe, and repelled or puſhed up only to a certain height from its ſurface, by the greater weight of air

remain

remain there ſurrounding the globe, and proceeding with it round the ſun?

In ſuch caſe, as there may be a continuity or communication of this fluid through the air quite down to the earth, is it not by the vibrations given to it by the ſun that light appears to us; and may it not be, that every one of the infinitely ſmall vibrations, ſtriking common matter with a certain force, enter its ſubſtance, are held there by attraction, and augmented by ſucceeding vibrations, till the matter has received as much as their force can drive into it?

Is it not thus that the ſurface of this globe is continually heated by ſuch repeated vibrations in the day, and cooled by the eſcape of the heat when thoſe vibrations are diſcontinued in the night, or intercepted and reflected by clouds?

Is it not thus that fire is amaſſed, and

makes

makes the greateſt part of the ſubſtance of combuſtible bodies?

Perhaps when this globe was firſt formed, and its original particles took their place at certain diſtances from the centre, in proportion to their greater or leſs gravity, the fluid fire, attracted towards that centre, might in great part be obliged, as lighteſt, to take place above the reſt, and thus form the ſphere of fire above ſuppoſed, which would afterwards be continually diminiſhing by the ſubſtance it afforded to organized bodies; and the quantity reſtored to it again by the burning or other ſeparating of the parts of thoſe bodies.

Is not the natural heat of animals thus produced, by ſeparating in digeſtion the parts of food, and ſetting their fire at liberty?

Is it not this ſphere of fire which kindles the wandering globes that ſometimes paſs through it in our courſe round the

ſun, have their ſurface kindled by it, and burſt when their included air is greatly rarefied by the heat on their burning ſurfaces?

THE END.